



## 2011 Q2 RELIABILITY REPORT

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## 1.0 OVERVIEW OF CYPRESS SEMICONDUCTOR, INC. TOTAL QUALITY MANAGEMENT SYSTEM

This report summarizes Cypress Semiconductor Product Reliability for the period of the 2nd quarter of 2011. It includes data from devices fabricated at both internal Cypress and external subcontractor wafer fabrication and assembly facilities.

Cypress Semiconductor has established aggressive reliability objectives. The quality standard at Cypress is zero defects, driven by a culture requiring continuous improvement in quality and reliability.

Product reliability is assured by a total quality management system. The quality management system is described in detail in the Cypress Semiconductor Quality Manual (Cypress Semiconductor Document Number 90-00001). Key reliability-related programs of the total quality management system are: (1) design rule review and approval; (2) control of raw materials and vendor quality; (3) manufacturing statistical process controls; (4) "Maverick Lot" yield limits; (5) formal training and certification of manufacturing personnel; (6) qualification of new products and manufacturing processes; (7) continuous reliability monitoring; (8) formal failure analysis and corrective action; and (9) competitive benchmarking.

Product Reliability data is accumulated as a result of new product Qualification Test Plan activities (Cypress Semiconductor Document Number 25-00040) as well as from the Reliability Monitor Program (Cypress Semiconductor Document Number 25-00008). All reliability test samples are obtained from standard production material. Sample selection is based on generic product families. These generic products are designed with very similar design rules and manufactured from a core set of processes.

Reliability strategy requires that every failure that occurs during reliability testing be subjected to failure analysis (Cypress Semiconductor Document Number 25-00039) to determine the failure mechanism. Corrective action is then implemented to prevent future failures, resulting in continuous improvement in product reliability.

Sabbas Daniel  
Executive Vice-President, Quality

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## 2.0 PRODUCT RELIABILITY

In product stress testing, the main emphasis is on the useful life section of the bathtub curve. The test methodology used to predict the useful life period is a life test under a dynamic bias and at temperatures of 125°C or 150°C at the maximum specified use voltage of the product. The duration at these temperatures is 1,000 and 500 hours, respectively.

At Cypress, product reliability tests are performed as part of both the qualification processes and the standard reliability monitoring program. Each fab site and technology family from each product line is sampled. These reliability tests utilize the following stress factors to accelerate failure: temperature, current and /or voltage. The product reliability tests currently employed at Cypress include Early Failure Rate (EFR) and Long Term Failure Rate (LFR).

### 2.1 EARLY FAILURE RATE SUMMARY

Early Failure Rate Determination: High Temperature Operating Life testing (HTOL), for as long as 96 hours, is used to estimate device early failure rate. This stress will typically correspond to the first 2000 hours of device operation in a system environment. The remainder of the device's lifetime is characterized with extended LFR testing (See Section 3)

**Test** : High Temperature Operating Life Test (HTOL)  
**Conditions** : Dynamic Operating Conditions, VCC nominal + 15%, 150°C or 125°C.  
**Duration** : 48 hours HTOL at 150°C or 96 hours at 125°C.  
 (Refer to Appendix C for derating factor calculation)  
**Failure** : A failure is any device that fails to meet data sheet electrical requirements.

**Table 1. Early Failure Rate Summary**

Technology	Device Hours	# Failed	FIT Rate	PPM	Failure Mode
LL65	1,583,907	2	11.5	39	Fab Defect-1 (See Note 2) Fab Defect-1 (See Note 3)
L28	73,440	0	Insufficient	0	None
C9	949,832	1	12.5	46	Fab Defect-1 (See Note 4)
R8	274,483	0	19.6	0	None
S8	2,488,370	0	2.2	0	None
C8	101,743	0	Insufficient	0	None
R95	1,780,043	1	6.7	13	Fab Defect-1 (See Note 4)
R9	953,738	0	5.6	0	None
R7	647,256	0	8.3	0	None
S4	189,012	0	28.5	0	None
R52	268,392	0	20.1	0	None
R42	339,662	0	15.8	0	None
<b>Grand Total</b>	<b>9,649,877</b>	<b>4</b>	<b>3.2</b>	<b>15</b>	<b>See above</b>

Notes: 1) Insufficient data – interpret as insufficient accumulated life-time hours to project a 60%confidence bound for a zero-fails sample.  
 2) CAR 201119006 – On-going Root Cause Analysis.  
 3) Defect in the Silicide formation. Improved pre-clean process was implemented.  
 4) Non-Visual Defects-Continuous defect reduction at Fab.



## 2.2 LONG TERM FAILURE RATE SUMMARY

A High Temperature Operating Life test (HTOL) is used to estimate long-term reliability. By operating the devices at accelerated temperature and voltage, hundreds of thousands of use hours can be compressed into hundreds of test hours.

- Test** : High Temperature Operating Life Test (HTOL)
- Conditions** : Dynamic Operating Conditions, VCC nominal +15% 150°C or 125°C.
- Duration** : A minimum of 80 hours at 150°C or 168 hours at 125°C  
Generally 500 hours at 150°C or 1000 hours at 125°C.  
(Refer to Appendix C for derating factor calculation)
- Failure** : A failure is any device that fails to meet data sheet electrical requirements.
- Fit Rate** : Derated to 55° C ambient, with 60% upper confidence bound for 0 failures, Ea =0.7ev (Refer to Appendix A)

**Table 2. Long Term Failure Rate Summary**

Technology	Device Hours	# Failed	FIT Rate	Failure Mode
R42	673,199	0	8.0	None
R8	670,165	0	8.0	None
C8	489,455	0	11.0	None
LL65	115,806	0	Insufficient	None
0.152um	24,839	0	Insufficient	None
C9	196,000	0	27.5	None
R9	584,919	0	9.2	None
R52	187,560	0	28.7	None
S8	2,348,336	0	2.3	None
S4	626,305	0	8.6	None
R95	969,541	1	12.3	Fab Defect-1 (See Note 2)
R7	443,996	0	12.1	None
<b>Grand Total</b>	<b>7,330,121</b>	<b>1</b>	<b>1.6</b>	<b>See Above</b>

- Notes: 1) Insufficient data – interpret as insufficient accumulated life-time hours to project a 60%confidence bound for a zero-fails sample.  
2) CAR 201051002 – Metal 1 Defect. Added scrub clean post M1 deposition.



## 2.3 DATA RETENTION SUMMARY

A high-temperature, non-biased bake test ensures that data retention meets established reliability goals. The devices are baked without bias at either 150°C for plastic-packaged devices, or 250°C for hermetically-packaged devices. DRET is performed on programmed devices to establish a failure rate for cell charge loss. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Acceleration Factor equation.

- Test** : Data Retention Testing (DRET)
- Conditions** : High temperature non-biased bake
- Duration** : A minimum of 500 hours at 150°C or 168 hours at 165°C  
Generally 1000 hours at 150°C or 500 hours at 165°C.
- Failure** : Devices are programmed with a worst case program pattern before being subjected to data retention testing. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Acceleration Factor equation.

**Table 3. Data Retention Summary**

Technology	Device Hours	# Failed	FIT Rate	Failure Mode
S4	6,986,282	0	0.36	none
S8	9,343,562	0	0.24	none
<b>Total</b>	<b>16,329,844</b>	<b>0</b>	<b>0.15</b>	<b>None</b>

### 3.0 PACKAGE RELIABILITY

Package-level reliability testing refers to the assessment of the overall reliability of the device in packaged form. This consists of subjecting packaged samples to reliability tests that expose the various sample sets to different stress conditions, after which the samples are tested for any degradation.

At Cypress, package reliability tests are performed as part of the qualification processes and as part of the standard reliability monitoring program. The reliability test employed is chosen based on the failure mechanism, as different stress tests accelerate different failure mechanisms. These reliability tests utilize one or more of the following stress factors to accelerate failure: temperature, moisture or humidity, current, voltage, and pressure. The package reliability tests currently employed at Cypress include Pressure Cooker Test (PCT), Highly Accelerated Stress Test (HAST), Temperature Cycle Test (TCT), and High Temperature Storage (HTS). Figure 1 shows the Cypress package reliability stress flow.

Surface-mount samples are preconditioned per Jedec Std JESD22-A113 prior to package reliability testing. This is required prior to TCT, PCT and HAST testing. Preconditioning simulates the board mounting process of the customer. It normally consists of a temperature cycle to simulate exposure to different temperatures during shipping, a bake to drive away the moisture inside the packages of the samples, a soak to drive a controlled amount of moisture into the package, and three cycles of convection reflow. Packages are soaked and reflowed based on their shipping moisture sensitivity classification. The samples are tested (acoustic and electrical) after preconditioning, failures from which are considered as preconditioning failures and not reliability failures. Preconditioning failures should be taken seriously, since these imply that the samples are not robust enough to withstand the board mounting process.

Cypress conducts all major classes of package reliability tests on each of its package families. The package characteristics and assembly locations are the primary considerations when grouping packages into package families. A package family may consist of a group of 44-lead to 144-lead TQFP packages manufactured at a particular manufacturing location.

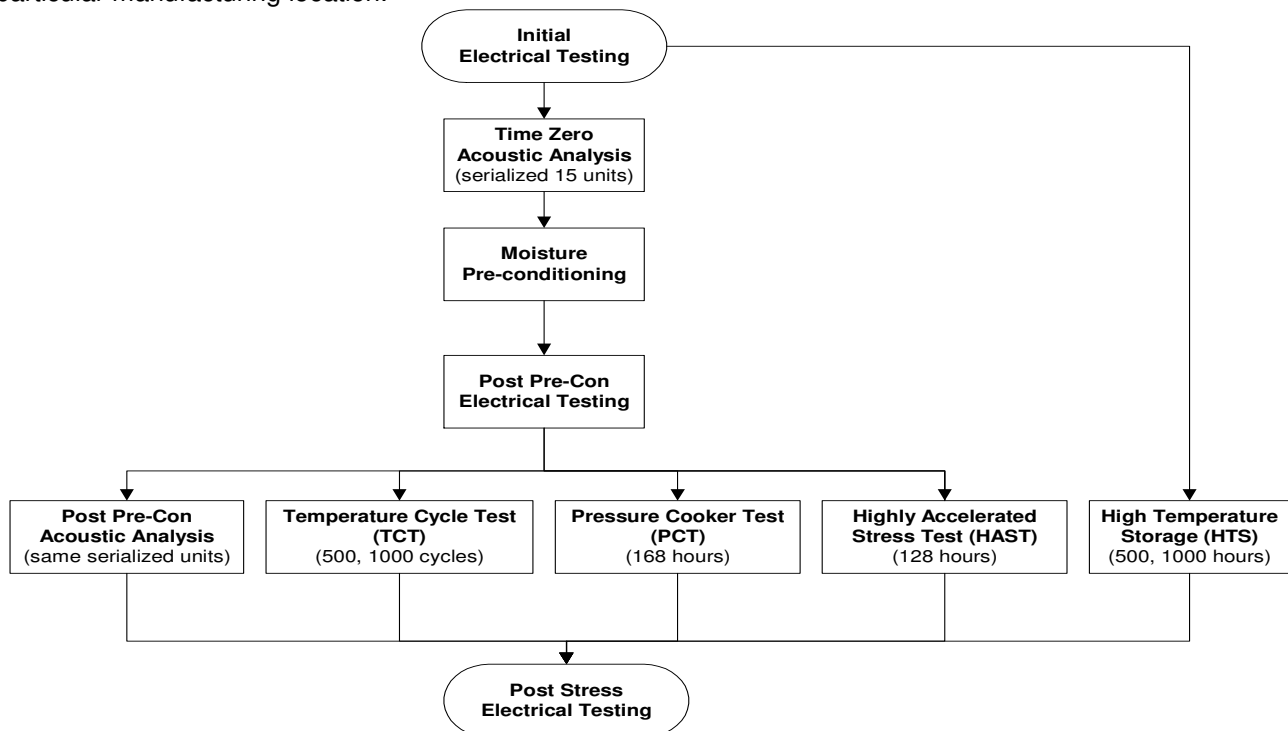


Figure 1. Cypress Package Reliability Stress Flow



### 3.1 PRESSURE COOKER TEST (PCT)

The Pressure Cooker Test is a highly accelerated packaging stress test used to ensure environmental durability of epoxy-packaged parts. Passivation cracks, ionic contamination, and corrosion susceptibility are all accelerated by this stress.

- Conditions** : 15 PSIG, 121 °C, No bias, for a minimum of 168 hours.
- Pre-Conditioning** : 5 cycles Temperature Cycle -65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
- Failure Modes** : Parametric shifts, high leakage, and/or catastrophic
- Failure Mechanism** : Die corrosion or contaminants such as foreign material on or within the package materials. Poor package sealing.

**Table 4. Pressure Cooker Test Failure Rate Summary**

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	448	0	0	0
FBGA (1.0-1.27)	848	0	0	0
FBGA (1.0-1.27, Pb-free)	975	0	0	0
FLIPCHIP CSP (Pb-Free)	235	0	0	0
PBGA (1.27)	29	0	0	0
PBGA (Cavity/Heat Sink)	60	0	0	0
PDIP (Pb-Free)	390	0	0	0
PLCC	120	0	0	0
PLCC (Pb-Free)	60	0	0	0
PQFP (Pb-free)	288	0	0	0
QFN (0.6mm, Saw Type, Pb-Free)	2513	0	0	0
QFN (COL, 0.6mm, Saw Type, Pb-free)	982	0	0	0
QFN (Punch Type, Pb-Free)	330	0	0	0
QFN (Saw Type, Pb-free)	1470	0	0	0
QSOP (Pb-Free)	118	0	0	0
SNC (Pb-Free)	1313	0	0	0
SOIC (J-Lead)	158	0	0	0
SOIC (J-Lead, Pb-Free)	1280	0	0	0
SOIC (Pb-Free)	3167	0	0	0
SSOP (Pb-Free)	1347	0	0	0
TQFP (Pb-Free)	710	0	0	0
TSOP (Pb-free)	1359	0	0	0
TSOP I (Pb-Free)	750	0	0	0
TSOP II (Pb-Free)	1993	0	0	0
TSSOP (Pb-Free)	419	0	0	0
VFBGA (0.75-0.8, 0.3mm)	59	0	0	0
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	1736	0	0	0
<b>Grand Total</b>	<b>23,157</b>	<b>0</b>	<b>0.00%</b>	<b>None</b>



### 3.2 HIGHLY ACCELERATED STRESS TEST (HAST)

Cypress uses HAST to accelerate temperature, humidity, bias failure mechanisms. This change was necessary because our package reliability had improved to the point where the old 85°C/85% R.H. temperature-humidity-bias testing would not induce failures. Failures are necessary to judge progress and compare packaging changes. HAST testing has been shown to be at least twenty times more accelerated than 85°C/85% R.H. temperature-humidity-bias testing.

- Conditions** : Present Conditions: 130°C / 85% RH minimum power dissipation, for a minimum of 128 hours.
- Pre-Conditioning** : 5 cycles Temperature Cycle –65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
- Failure Modes** : Parametric shifts, high leakage, and/or catastrophic
- Failure Mechanism** : Die corrosion or contaminants such as foreign material on or within the package materials. Poor package sealing.

**Table 5. Highly Accelerated Stress Test (HAST) Failure Rate Summary**

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	119	0	0	None
FBGA (1.0-1.27)	30	0	0	None
FBGA (1.0-1.27, Pb-free)	229	0	0	None
PDIP (Pb-Free)	150	0	0	None
PLCC (Pb-Free)	25	0	0	None
QFN (0.6mm, Saw Type, Pb-Free)	847	5	0.59%	5-Passivation Crack due to Saw (See Note 1)
QFN (COL, 0.6mm, Saw Type, Pb-free)	87	0	0	None
QFN (Punch Type, Pb-Free)	119	0	0	None
QFN (Saw Type, Pb-free)	412	0	0	None
QSOP (Pb-Free)	30	0	0	None
SNC (Pb-Free)	69	0	0	None
SOIC (J-Lead)	79	0	0	None
SOIC (J-Lead, Pb-Free)	447	0	0	None
SOIC (Pb-Free)	1,544	0	0	None
SSOP (Pb-Free)	434	0	0	None
TQFP (Pb-Free)	30	0	0	None
TSOP (Pb-free)	238	0	0	None
TSOP I (Pb-Free)	417	0	0	None
TSOP II (Pb-Free)	813	0	0	None
TSSOP (Pb-Free)	90	0	0	None
VFBGA (0.75-0.8, 0.3mm)	30	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	592	0	0	None
<b>Grand Total</b>	<b>6,831</b>	<b>5</b>	<b>0.07%</b>	<b>See Above</b>

Note: 1) CAR 201044007– Implementation of new saw parameter setting



### 3.3 TEMPERATURE CYCLE TEST (TC)

Differences in thermal expansion coefficients are accentuated by cycling devices through temperature extremes. If the materials do not expand and contract equally, large stresses can develop. The Temperature Cycle test stresses mechanical integrity by exposing a device to alternating temperature extremes. Weakness and thermal expansion mismatches in die interconnections, die attach, and wire bonds are often detected with this accelerated test.

- Condition** : MIL-STD-883D, Method 1010, Condition B, -55°C to 125°C  
MIL-STD-883D, Method 1010, Condition C, -65°C to 150°C  
(Refer to Appendix C for derating factor calculation)
- Pre-Conditioning** : 5 cycles Temperature Cycle -65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
- Duration** : 500 cycles minimum at Condition C,  
1000 cycles minimum at Condition B
- Failure Mode** : Parametric shifts and catastrophic failures
- Failure Mechanism** : Wire bond, cracked or lifted die and package failure.

**Table 6. Temperature Cycling Failure Rate Summary**

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	994	0	0	None
FBGA (1.0-1.27)	1,771	0	0	None
FBGA (1.0-1.27, Pb-free)	2,576	0	0	None
FLIPCHIP CSP (Pb-Free)	572	0	0	None
PBGA (1.27)	89	0	0	None
PBGA (Cavity/Heat Sink)	60	0	0	None
PBGA (Cavity/Heat Sink, Pb-free)	60	0	0	None
PDIP (Pb-Free)	411	4	0.97%	4-Cut Wedge (See Note 1)
PLCC	120	0	0	None
PLCC (Pb-Free)	60	0	0	None
PQFP (Pb-free)	612	0	0	None
QFN (0.6mm, Saw Type, Pb-Free)	2,494	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	1,914	0	0	None
QFN (Punch Type, Pb-Free)	390	0	0	None
QFN (Saw Type, Pb-free)	2,272	0	0	None
QSOP (Pb-Free)	90	0	0	None
SNC (Pb-Free)	1,373	0	0	None
SOIC	20	0	0	None
SOIC (J-Lead)	160	0	0	None
SOIC (J-Lead, Pb-Free)	2,375	0	0	None
SOIC (Pb-Free)	7,759	9	0.12%	9-Cut Wedge (See Note 2)
SSOP (Pb-Free)	2,887	0	0	None
TQFP (Pb-Free)	1,018	0	0	None
TSOP (Pb-free)	1,395	0	0	None
TSOP I (Pb-Free)	953	0	0	None
TSOP II (Pb-Free)	3,124	0	0	None
TSSOP	30	0	0	None
TSSOP (Pb-Free)	480	0	0	None
VFBGA (0.75-0.8, 0.3mm)	90	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	2,804	0	0	None
<b>Grand Total</b>	<b>38,953</b>	<b>13</b>	<b>0.03%</b>	<b>See Above</b>

Note: 1) CAR 201121014 – On-going Root Cause Analysis  
2) CAR 201121015 – On-going Root Cause Analysis

### 3.4 HIGH TEMPERATURE STORAGE (HTS)

A high-temperature, non-biased bake test is performed to determine the effect on devices of long-term storage at elevated temperatures without any electrical stresses applied. The devices are baked without bias at either 150°C or 165°C for plastic-packaged devices. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Arrhenius equation.

**Test** : High Temperature Storage (HTS)  
**Conditions** : High temperature non-biased bake  
**Duration** : A minimum of 500 hours tested up to 1000 hours at 150°C  
**Failure Mode** : Parametric shifts and catastrophic failures  
**Failure Mechanism** : Lifted ball bonds due to gross intermetallic growth

**Table 7. High Temperature Storage Failure Rate Summary**

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	578	0	0	None
FBGA (1.0-1.27)	355	0	0	None
FBGA (1.0-1.27, Pb-free)	660	0	0	None
FLIPCHIP CSP (Pb-Free)	160	0	0	None
PBGA (1.27)	60	0	0	None
PBGA (Cavity/Heat Sink)	30	0	0	None
PBGA (Cavity/Heat Sink, Pb-free)	30	0	0	None
PDIP (Pb-Free)	390	0	0	None
PLCC	120	0	0	None
PLCC (Pb-Free)	60	0	0	None
PQFP (Pb-free)	120	0	0	None
QFN (0.6mm, Saw Type, Pb-Free)	1,150	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	340	0	0	None
QFN (Punch Type, Pb-Free)	359	0	0	None
QFN (Saw Type, Pb-free)	1,219	0	0	None
QSOP (Pb-Free)	120	0	0	None
SNC (Pb-Free)	434	0	0	None
SOIC (J-Lead)	160	0	0	None
SOIC (J-Lead, Pb-Free)	591	0	0	None
SOIC (Pb-Free)	2,156	0	0	None
SSOP (Pb-Free)	1,007	0	0	None
TQFP (Pb-Free)	390	0	0	None
TSOP (Pb-free)	680	0	0	None
TSOP I (Pb-Free)	380	0	0	None
TSOP II (Pb-Free)	615	0	0	None
TSSOP	30	0	0	None
TSSOP (Pb-Free)	448	0	0	None
VFBGA (0.75-0.8, 0.3mm)	60	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	665	0	0	None
<b>Grand Total</b>	<b>13,367</b>	<b>0</b>	<b>0.00%</b>	<b>None</b>

## APPENDIX A: FAILURE RATE CALCULATION

### Thermal Acceleration Factors

Acceleration factors (AF) for thermal stresses (Early Failure Rate, Latent Failure Rate, Data Retention and High Temperature Storage) are calculated from the Arrhenius equation)

$$AF = \exp \left( \frac{E_a}{k} \left( \frac{1}{T_u} - \frac{1}{T_t} \right) \right)$$

where :

$E_a$  = Activation Energy of the defect mechanism

$K$  = Boltzmann's constant =  $8.62 \times 10^{-5}$  eV/Kelvin

$T_t$  is the junction temperature of the device under stress

$T_u$  is the junction temperature of the device at use conditions

While there is no substitute for experimentally determining the activation energy, obtaining this information is very difficult because few devices fail stress tests. In the absence of experimental data, the following literature values are used.



## APPENDIX A: FAILURE RATE CALCULATION (cont.)

### Temperature-Humidity Acceleration Factors

Cypress estimates acceleration factors for temperature-humidity stresses (Pressure Cooker Test and Highly Accelerated Stress Test) from a model developed by Hallberg and Peck (“Quality and Reliability Engineering International”. Vol. 7, 1991).

$$AF = \left( \frac{RH_t}{RH_u} \right)^{-3} \exp \frac{E_a}{k} \left( \left( \frac{1}{T_u} - \frac{1}{T_t} \right) \right)$$

where :

- $T_u$  = use environment junction temperature (°K)
- $T_t$  = test environment junction temperature (°K)
- $E_a$  = failure mechanism activation energy (0.9 for corrosion)
- $k$  = Boltzman’s Constant ( $8.62 \times 10^{-5}$  eV/°Kelvin)
- $RH_u$  = use environment relative humidity
- $RH_t$  = test environment relative humidity
- AF = acceleration factor

The Hallberg and Peck model requires the stress junction temperature and relative humidity as well as the use temperature and relative humidity. To estimate the use relative humidity, we assume that the device room temperature is 35 °C (95 °F) and the room relative humidity is 100%. From any Handbook of Chemistry and Physics, the vapor pressure of water VP (water) at 35 °C is 41.175 mm Hg. If we assume that the device will operate with a junction temperature of 70 °C (VP (water) at 70 °C is 233.7 mm Hg), the junction relative humidity (RHj) is

$$RHj = 100\% \left( \frac{41.175}{233.7} \right) = 17.6\%$$

The operating conditions of the devices are then 70 °C and 17.6% relative humidity.

Our Pressure Cooker Test (PCT) submits the devices to a temperature of 121 °C and 100% relative humidity. Using the Hallberg and Peck model, the acceleration factor for the PCT stress can be calculated:

$$AF = \left( \frac{17.6}{100} \right)^{-3} \exp \frac{0.9}{k} \left( \left( \frac{1}{343} - \frac{1}{394} \right) \right) = 9,433$$

### APPENDIX A: FAILURE RATE CALCULATION (cont.)

The acceleration factor for HAST is calculated similarly, except that junction temperature heating effects must be included when estimating the relative humidity at the die surface. Assuming an average junction temperature rise of 5°C, the relative humidity at the die surface during 130 C HAST testing can be calculated.

$$VP (130^{\circ}C) = 2026.10 \text{ mm Hg}$$

$$VP (135^{\circ}C) = 2347.26 \text{ mm Hg}$$

$$RH_j = 85\% \left( \frac{2026.10}{2347.26} \right) = 73.4\%$$

$$AF = \left( \frac{17.6}{73.4} \right)^{-3} \exp \frac{0.9}{k} \left[ \left( \frac{1}{343} - \frac{1}{408} \right) \right] = 9,261$$

Similarly, for 140°C HAST testing,

$$VP (140^{\circ}C) = 2710.92 \text{ mm Hg}$$

$$VP (145^{\circ}C) = 3116.76 \text{ mm Hg}$$

$$RH_j = 85\% \left( \frac{2710.92}{3116.76} \right) = 73.9\%$$

$$AF = \left( \frac{17.6}{73.9} \right)^{-3} \exp \frac{0.9}{k} \left[ \left( \frac{1}{343} - \frac{1}{418} \right) \right] = 17,433$$



## APPENDIX A: FAILURE RATE CALCULATION (cont.)

### Failure Rate Calculation

For all but LFR test, Cypress reports the failure rate in terms of ppm. Early life reliability is reported in terms of ppm defective expected during the first year of use under typical use conditions. No upper confidence bound will be used for this estimate. The ppm defective is the ratio of the number of rejects to the number of samples and expressed in ppm.

$$PPM = \left( \frac{\text{Total Rejects}}{\text{Total Samples}} \right) \times 1,000,000$$

Intrinsic, or later life reliability, shall be reported using the exponential model, in terms of FITs, with a 60% upper confidence bound for 0 failures or the demonstrated FIT estimate in the case there are failures.

$$FR (FIT) = \chi^2_{\alpha, 2n+2} / (2 * AF * Device Hours) * 10^9$$

where:

$\chi^2_{\alpha, 2n+2}$  = Chi square factor for  $2n+2$  degrees of freedom at 60% confidence level.

$n$  = number of failure.

AF = Thermal Acceleration factor and is calculated per Arrhenius equation assuming a 0.7eV activation energy.

Voltage acceleration factor is not included in failure rate calculation even though voltage acceleration may be used during stress. Typical use conditions shall be considered to be 55°C ambient with a 15°C temperature rise at the junction. Thus, use junction temperature is 70°C.

## APPENDIX B: TEMPERATURE CYCLING STRESS MODELS

Two acceleration factor (AF) models are used to model temperature cycle failures. The model proposed by Zelenka [1] and others uses the epoxy molding temperature ( $T_{\text{mold}} = 170 \text{ }^\circ\text{C}$ ) and the minimum temperature reached during temperature cycling, ( $T_{\text{min}}$ ).

$$AF_{\text{brittle}} = \left( \frac{T_{\text{mold}} - T_{\text{min, stress}}}{T_{\text{mold}} - T_{\text{min, use}}} \right)^m$$

The model constant,  $m$ , is experimentally calculated for each failure mechanism. The acceleration factor is labeled 'brittle' because the derivation of this equation assumes brittle fracture mechanics. Basically, the model assumed that cracks advance a little every time the maximum stress is reached. The maximum stress is assumed to be proportional to the difference in temperature between the minimum and maximum stress temperatures. For plastic-encapsulated devices, the stress is minimum during molding, ( $T_{\text{mold}}$ ), and maximum during the lowest temperature reached during temperature cycling, ( $T_{\text{min}}$ ).

The model constant,  $m$ , is a function of the failure mechanism.

Thin film cracking	$m = 12$ (Blish and Vaney [2])
Al/Au Intermetallic fractures	$m = 4$
Chip-out (cratering) bond failures	$m = 7$ (Dunn and McPherson [3])

For ductile materials, dislocation movement dominates the fracture mechanics and a different model is used.

The second, and most widely accepted model, uses the difference between the minimum and maximum temperatures during temperature cycle testing ( $T_{\text{min}}$  and  $T_{\text{max}}$ ) to calculate an acceleration factor.

$$AF_{\text{ductile}} = \left( \frac{T_{\text{max, stress}} - T_{\text{min, stress}}}{T_{\text{max, use}} - T_{\text{min, use}}} \right)^m$$

The model constant, ' $m$ ', is again experimentally calculated for each failure mechanism.

Coffin and Manson [4] developed this model from empirical observations of metal fatigue. In ductile materials, if the applied stress is high enough, dislocations are produced. At the high temperature condition of the temperature cycling stress, dislocations are forced towards one metal surface. At the low temperature, the dislocations try to glide back to their original position, but many cannot because they became entangled with other dislocations. After many cycles, these tangles grow until cracking, and finally failure, occurs. Both minimum and maximum temperatures are important, because both contribute to dislocation movement and entanglement. This model is recommended for any failures involving ductile materials. Model constants for ductile failure follow.

Wirebond breakage	$m = 5.16$ (Cypress experimentation)
Solder Fatigue	$m = 2$ (Blish and Vaney [2])



## APPENDIX B: TEMPERATURE CYCLING STRESS MODELS (cont.)

Our commercial devices are specified to operate between 0°C and 70 °C. Using this information, the acceleration factor, AF, between use and Military Condition C stress testing (-65°C to 150°C), for the brittle, thin film cracking failure mechanism and ductile, wire bond breakage failure mechanism can be calculated.

$$\text{AF brittle} = \left( \frac{170 - (-65)}{170 - 0} \right)^{12} = 49$$

$$\text{AF ductile} = \left( \frac{150 - (-65)}{70 - 0} \right)^{5.16} = 327$$

### References:

- [1] R.L. Zelenka, IEEE/IRPS, pp. 30-34, 1991
- [2] R.C. Blish and P.R. Vaney, IEEE/IRPS, pp 22-29, 1991
- [3] C.F. Dunn and J.W. McPherson, IEEE/IRPS, pp 252-258, 1990
- [4] S.S. Manson, thermal Stress and Low-Cycle Fatigue, (Robert Krieger : Malabar, Florida), 1981.



## APPENDIX C: EQUIVALENCE OF DIFFERENT STRESS TEST CONDITIONS

During stress testing, more than one set of test conditions were used. To account for this difference, stress test hours or cycles at the lower stress condition were derated and then added to the total for the most severe stress test condition.

### Dynamic (HTOL)

HTOL (EFR/LFR) test is performed at 150 °C and 125 °C. Using the Arrhenius equation (Appendix A) and an activation energy of 0.7 eV, the derating factor, DF, between 125°C and 150 °C can be calculated.

$$DF \text{ (between 125C and 150C)} = \exp \left( \frac{0.7}{k} \left( \frac{1}{150 + 15 + 273} - \frac{1}{125 + 15 + 273} \right) \right) = 0.326$$

The derating calculation assumes a 15 °C rise due to junction heating.

### Temperature Cycling

Two different temperature cycling conditions were used to measure reliability, -65°C to 150°C and -55°C to 125°C. Using the brittle failure mechanism model with  $m = 12$ , the derating factor between -65°C to 150°C and -55°C to 125°C is calculated.

$$DF = \left( \frac{170 - (-55)}{170 - (-65)} \right)^{12} = 1.685$$

Using the ductile failure mechanism model with  $m = 5.16$ , the derating factor between -65°C to 150°C and -55°C to 125°C is obtained.

$$DF = \left( \frac{125 - (-55)}{150 - (-65)} \right)^{5.16} = 2.501$$

### HAST

The derating factor between two HAST conditions, 140 °C / 85%RH and 130 °C / 85% RH is simply the ratio of the acceleration factors (See Appendix A)

$$DF = \frac{9,261}{17,433} = 0.531$$



**From:** 7/3/2010

**To:** 07/03/2011

## Summary Detail -- EFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
LL65												
	MID	100901	R1C	CY7C1313KO	125	2.05	96	96	45	0		
	MID	103004	R1A	7C1512KO	125	2.05	96	96	1913	0		
	MID	103004	R1B-Split 1	7C1514KO	125	2.05	96	96	2044	0		
	MID	103004	R1B-Split 2	7C1514KO	125	2.05	96	96	9	0		
	MID	103004	R2A	7C1512KO	125	2.05	96	96	1925	0		
	MID	103004	R2B-Split 1	7C1514KO	125	2.05	96	96	1345	1	103004-2BE1	M2 Cu Void
	MID	103004	R2B-Split 2	7C1514KO	125	2.05	96	96	30	0		
	MID	103004	R2B-Split 3	7C1514KO	125	2.05	96	96	10	0		
	MID	103004	R3-Split 1	7C1514KO	125	2.05	96	96	1836	0		
	MID	103004	R3-Split 2	7C1514KO	125	2.05	96	96	11	0		
	MID	103004	R3-Split 3	7C1514KO	125	2.05	96	96	223	0		
	MID	103004	R4A	7C1514KO	125	2.05	96	96	550	0		
	MID	103004	R4B	7C1514KO	125	2.05	96	96	685	0		
	MID	103408	R1-Split 1	7C1514KO	125	1.55	96	96	2342	0		
	MID	103408	R1-Split 2	7C1514KO	125	1.55	96	96	1691	0		
	MID	103408	R2-Split 1	7C1512KO	125	1.55	96	96	3545	1	103408-2E1	Contact to gate short caused by Ni residue

MID	103408	R2-Split 2	7C1512KO	125	1.55	96	96	1009	0
MID	103408	R2-Split 3	7C1512KO	125	1.55	96	96	364	0
MID	103408	R3-Split 1	7C1518KO	125	1.55	96	96	2364	0
MID	103408	R3-Split 2	7C1518KO	125	1.55	96	96	1820	0
MID	103408	R6	7C1518KO	125	1.55	96	96	3252	0
MID	103408	R7	7C1514KO	125	1.55	96	96	2840	0
MID	104602	R1	CY7C1512KV18-300BZXC	125	2.05	96	96	1600	0
MID	104605	R1A	CY7C1412KV18-250BZC	125	2.25	96	96	1010	0
MID	104605	R1B	CY7C1413KV18-250BZC	125	2.25	96	96	1179	0
MID	104901	R1A	7C1313KO	125	2.05	96	96	661	0
MID	104901	R1B	CY7C1312KV18-250BZCES	125	2.05	96	96	746	0
MID	104901	R1C	CY7C1312KV18-250ZXCES	125	2.05	96	96	276	0
MID	104901	R1D	CY7C1314KV18-250BZCES	125	2.05	96	96	371	0
MID	104901	R1E	CY7C1314KV18-250ZXCES	125	2.05	96	96	282	0
MID	104901	R1F	CY7C1313KV18-250BZCES	125	2.05	96	96	272	0
MID	104901	R1G	CY7C1315KV18-250BZCES	125	2.05	96	96	185	0
MID	104901	R1H	CY7C1315KV18-250BZIES	125	2.05	96	96	463	0
MID	104901	R2-Split 1	7C11738KO	125	2.05	96	96	100	0
MID	104901	R2-Split 2	7C11738KO	125	2.05	96	96	1087	0
MID	104901	R3	7C11738KO	125	2.05	96	96	405	0
MID	104901	R3	7C11738KO	125	2.05	96	96	262	0
MID	105010	R1	7C1614KO	125	2.05	96	96	1031	0
MID	105010	R2	7C1614KO	125	2.05	96	96	993	0
MID	111807	R1	7C1420KO	125	2.07	96	96	3392	0
MID	111807	R2	7C1420KO	125	2.07	96	96	2790	0
MID	111807	R3	7C1420KO	125	2.07	96	96	4069	0
MID	111807	R3	7C1420KO	125	2.07	96	96	120	0



**Summary for Technology: LL65**

**43 records**

**Sum**

**51147 2**

**L28**

MID	110605	R1	CY2305ESXC-1H	150	3.8	48	48	1530	0
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**Summary for Technology: 28**

**1 records**

**Sum**

**1530 0**

**C9**

MID	104105	R1	CY7C1041DV33-10ZSXI	150	3.77	48	48	3436	0
MID	104105	R2	CY7C1041DV33-10ZSXI	150	3.77	48	48	3545	0
MID	104105	R3	CY7C1041DV33-10ZSXI	150	3.77	48	48	3564	1
MID	105004	R2	CY7C1061DV33-10BVXI	125	3.7	96	96	2030	0
MID	105004	R3	CY7C1061DV33-10BVXI	125	3.7	96	96	1999	0
MID	105004	R4	CY7C1061DV33-10BVXI	125	3.7	96	96	1931	0
MID	MR104054	R1	CY7C1041DV33-10ZSXI	150	3.77	48	48	5398	0

104105-3E1 No Visual Defect

**Summary for Technology: C9**

**7 records**

**Sum**

**21903 1**

**R8**

MID	103206	R1	CY7C62162DK	125	2.75	96	96	2534	0
MID	MR102074	R1A	7G62162DK-**GBZI	125	2.4	120	120	300	0
MID	MR102079	R1	CY62146DV30LL-55BVI	125	2.4	96	96	299	0
MID	MR103040	R1	CY62157DV30LL-55BVIT	125	2.4	96	96	300	0
MID	MR103079	R1	7G62164DK	150	5.0	24	24	5130	0
MID	MR103080	R1	7G62162DK-**GBVI	125	2.4	24	24	299	0
MID	MR104042	R1	CY62157DV30LL-55BVI	125	2.4	96	96	300	0
MID	MR104055	R1A	CY621675EV30LL-45BVXI	125	1.85	144	144	470	0
MID	MR111059	R1	CY62157DV30LL-55BVIT	125	2.4	96	96	300	0

Summary for Technology: R8

		9	records						9932	0
Sum										
S8										
MID	95107	R1	CY2DP1510AXC	125	3.96	96	96	51	0	
MID	95107	R1A-Split 1	CY2DP1510AXC	150	2.53	48	48	765	0	
MID	95107	R1A-Split 2	CY2DP1510AXC	150	2.53	48	48	767	0	
CCD	100101	R1A-Split 1	CY8CTMA300EES5-48LTXI	150	2.07	48	48	949	0	
CCD	100101	R1A-Split 2	CY8CTMA300EES5-48LTXI	150	2.07	48	48	591	0	
CCD	100101	R2	CY8CTMA300EES5-48LTXI	150	2.07	48	48	50	0	
CCD	100101	R2-Split 1	CY8CTMA300EES5-48LTXI	150	2.07	48	48	150	0	
CCD	100101	R2-Split 2	CY8CTMA300EES5-48LTXI	150	2.07	48	48	148	0	
CCD	100101	R2-Split 3	CY8CTMA300EES5-48LTXI	150	2.07	48	48	197	0	
CCD	100101	R2-Split 4	CY8CTMA300EES5-48LTXI	150	2.07	48	48	149	0	
CCD	100101	R2-Split 5	CY8CTMA300EES5-48LTXI	150	2.07	48	48	149	0	
CCD	100101	R2-Split 6	CY8CTMA300EES5-48LTXI	150	2.07	48	48	735	0	
CCD	101101	R4-Split 1	CY8C3866AXI-040ES3	150	2.07	48	48	600	0	
CCD	101101	R4-Split 2	CY8C3866AXI-040ES3	150	2.07	48	48	949	0	
CCD	101101	R5-Split 1	CY8C3866AXI-040ES3	150	2.07	48	48	1076	0	
CCD	101101	R5-Split 2	CY8C3866AXI-040ES3	150	2.07	48	48	474	0	
MID	102204	R1	CY14B101Q2A-SXI	125	3.0	48	48	25	0	
MID	102204	R2E	CY14E101Q3A-SFXI	125	3.0	48	48	25	0	
MID	102204	R2F	CY14B101Q2A-SXI	150	3.0	48	48	1073	0	
MID	102204	R3	CY14MB064Q2A-SXIES	150	3.3	48	48	631	0	
MID	102204	R3A	CY14MB064J2-SXIES	150	3.3	48	48	1461	0	
MID	102204	R4	CY14B101Q1A-SXIES	150	5.5	48	48	883	0	
MID	102204	R4A	CY14ME064Q2A-SXI	150	5.5	48	48	450	0	
MID	102204	R4B	CY14ME064Q2A-SXI	150	5.5	48	48	588	0	

MID	102204	R4C	CY14ME064J2-SXI	150	5.5	48	48	1008	0
MID	102204	R5	CY14ME064Q2A-SXI	150	5.5	48	48	384	0
MID	102204	R5A	CY14ME064J2-SXI	150	5.5	48	48	507	0
MID	102305	R1	CY14V104LA-BA45XIES	150	5.25	48	48	817	0
MID	102305	R1A	CY14V104LA-BA45XIES	150	5.25	48	48	223	0
MID	102305	R2	CY14V104NA-BA25XI	150	5.25	48	48	228	0
MID	102305	R2A	CY14V104NA-BA25XI	150	5.25	48	48	256	0
CCD	102607	R1	CY8C20466A-24LQXIES	150	2.1	72	72	999	0
CCD	102607	R2-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	630	0
CCD	102607	R2-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	369	0
CCD	102607	R3-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	822	0
CCD	102607	R3-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	209	0
CCD	102607	R3-Split 3	CY8C20466A-24LQXIES	150	2.1	48	48	467	0
CCD	102607	R4-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	210	0
CCD	102607	R4-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	618	0
CCD	102607	R4-Split 3	CY8C20466A-24LQXIES	150	2.1	48	48	171	0
CCD	102607	R5-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	622	0
CCD	102607	R5-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	878	0
CCD	102607	R6	CY8C20466A-24LQXIES	150	2.1	48	48	1000	0
CCD	102607	R7-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	114	0
CCD	102607	R7-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	884	0
CCD	102607	R8-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	420	0
CCD	102607	R8-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	580	0
CCD	102607	R9	CY8C20466A-24LQXIES	150	2.1	48	48	999	0
CCD	102607	R10	CY8C20466A-24LQXIES	150	2.1	48	48	1000	0
CCD	103105	R1	CG7280AM	150	2.07	48	48	1005	0
CCD	103105	R2-Split 1	CY8CTMA300E-48LTXI	150	2.07	48	48	543	0

CCD	103105	R2-Split 2	CY8CTMA300E-48LTXI	150	2.07	48	48	462	0
CCD	103105	R3	CY8CTMA340-48LQI-01	150	2.07	48	48	1005	0
CCD	103105	R4	CG7280AM	150	2.07	48	48	1005	0
CCD	103105	R5	CY8CTMA301E-48LQXI	150	2.07	48	48	1002	0
CCD	103605	R1-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	996	0
CCD	103605	R1-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	500	0
CCD	103605	R2-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	1000	0
CCD	103605	R2-Split 2	CY8C20466A-24LQXIES	150	2.1	48	48	500	0
MID	103804	R3	7C1404B6CC	150	3.3	48	48	3266	0
MID	103804	R4	7C1404B6CC-	150	3.3	48	48	1896	0
CCD	104403	R1-Split 1	CY8C20466A-24LQXIES	150	2.1	48	48	1869	0
DCD	104703	R1	CYONSFN3000-LBXC	150	2.0	48	48	520	0
CCD	MR102075	R1A	CY8C20466-24LQXI	150	2.1	96	96	1000	0
CCD	MR102075	R1B	CY8C20466-24LQXI	150	2.1	120	120	959	0
CCD	MR102075	R1C-Split 1	CY8C20466-24LQXI	150	2.1	48	48	399	0
CCD	MR102075	R1D	CY8C20466-24LQXI	150	2.1	48	48	475	0
CCD	MR102075	R1E-Split 1	CY8C20466-24LQXI	150	2.1	48	48	1439	0
CCD	MR102075	R1E-Split 2	CY8C20466-24LQXI	150	2.1	48	48	521	0
MID	MR111078	R1	7C1404B6CC	150	5.0	96	96	621	0

**Summary for Technology: S8**

**70 records**

**Sum**

**48334 0**

**C8**

DCD	111803	R1	CY7C68320C-100AXA	150	3.8	24	24	642	0
DCD	111803	R1	CY7C68320C-100AXA	150	3.8	48	48	158	0
DCD	111803	R2	CY7C68320C-100AXA	150	3.8	24	24	800	0
DCD	111803	R3	CY7C68320C-100AXA	150	3.8	24	24	800	0
DCD	MR103053	R1	CYWB0224ABS-BVXI	125	3.8	120	120	300	0

DCD	MR104085	R1	CYWB0224ABS-BVXI	125	3.8	96	96	499	0
DCD	MR111066	R1	CYWB0224ABS-BVXI	125	3.8	96	96	429	0

**Summary for Technology: C8**

**7 records**

**Sum 3628 0**

**R95**

MID	091206	R1	CY621675EV18LL-55BVXI	125	1.85	96	96	3000	0		
MID	091206	R2-Split 1	CY621675EV18LL-55BVXI	125	1.85	96	96	10	0		
MID	091206	R2-Split 2	CY621675EV18LL-55BVXI	125	1.85	96	96	1445	1	091206-2E1	No Visual Defect
MID	091206	R3	CY621675EV30LL-45BVXI	125	1.85	96	96	2196	0		
MID	091206	R3	CY621675EV30LL-45BVXI	125	1.85	144	144	1	0		
MID	091312	R1	7A62147FC	125	1.85	96	96	5760	0		
MID	091312	R2	7A62147FC	125	1.85	96	96	5838	0		
MID	101301	R1	CY62151EV18LL-350ZSXI	125	1.85	96	96	1992	0		
MID	101301	R1	CY62151EV18LL-350ZSXI	125	1.85	96	96	1	0		
MID	101301	R3	CY62151EV18LL-350ZSXI	125	1.85	96	96	3958	0		
MID	103305	R1	CY621685EV30LL-45BVXI	125	1.85	96	96	3364	0		
MID	105211	R1	CY62148ESL	150	1.85	48	48	800	0		
MID	105211	R2	CY62138FV30LL	150	1.85	48	48	800	0		
MID	105211	R3	CY62128ELL	150	1.85	48	48	798	0		
MID	110708	R1	7A62128KC	150	1.85	24	24	800	0		
MID	110708	R2	7A62128KC	150	1.85	24	24	800	0		
MID	110708	R3	7A62128KC	150	1.85	24	24	800	0		
MID	111410	R2	7A62126FC	150	1.85	24	24	799	0		
MID	111410	R2	7A62126FC	150	1.85	48	48	799	0		
MID	111410	R3	7A62126FC	150	1.85	24	24	799	0		
MID	111411	R2	7A62128KC	150	1.85	24	24	400	0		
MID	111411	R2A	CY62128BNLL-70SXA	125	5.75	48	48	445	0		



MID	111411	R3	7A62128KC	150	1.85	24	24	400	0
MID	111411	R3A	CY62128ELL-55ZAXE	125	1.85	48	48	425	0
MID	111411	R4	CY62128ELL-55ZAXE	125	1.85	48	48	450	0
MID	111412	R1	CY62128BNLL-70SXA	125	5.75	48	48	445	0
MID	111412	R2	CY62128ELL-55ZAXE	125	1.85	48	48	425	0
MID	111412	R3	CY62128ELL-55ZAXE	125	1.85	48	48	450	0
MID	111412	R6	7A62128KC	150	1.85	24	24	400	0
MID	111701	R3B	CY621675EV30LL-45BVXI	125	1.85	96	96	3511	0
MID	MR103078	R1	7A62157FC	125	1.85	48	48	14386	0
MID	MR104077	R1	7A62157FC	125	2.2	24	24	14589	0
MID	MR111077	R1	CY62146ESL-45ZSXI	125	1.85	96	96	5260	0

**Summary for Technology: R95**

**33 records**

**Sum**

**76346 1**

**R9**

MID	103901	R2	CY7C1313TV18-250BZC	125	2.7	120	120	4387	0
MID	103901	R2-Split 1	CY7C1313TV18-250BZC	125	2.7	96	96	4079	0
MID	112003	R1	CY7C1460AV33-167AXC	150	2.25	48	48	1806	0
MID	112003	R1A	CY7C1460AV33-167AXC	150	2.25	48	48	1787	0
MID	112003	R2	CY7C1460AV33-167AXC	150	2.25	48	48	1935	0
MID	112003	R2A-Split 1	CY7C1460AV33-167AXC	150	2.25	48	48	384	0
MID	112003	R2A-Split 2	CY7C1460AV33-167AXC	150	2.25	48	48	903	0
MID	112003	R2A-Split 3	CY7C1460AV33-167AXC	150	2.25	48	48	308	0
MID	112003	R3A	CY7C1460AV33-167AXC	150	2.25	48	48	1636	0
MID	MR103082	R1	7C1380XC-**RAZC	150	2.5	48	48	1420	0
MID	MR103082	R1A	7C1380XC-**RAZC	150	2.5	48	48	3094	0
MID	MR102067	R4	7C1380XC-**RAZCB	150	2.25	48	48	298	0
MID	MR112079	R1	CY7C1515JV18-333BZI	125	5.0	96	96	50	0

MID	MR112079	R2	CY7C1570V18-375BZC	125	5.0	96	96	50	0
MID	MR112079	R3	CY7C1515JV18-333BZI	125	5.0	96	96	50	0
MID	MR112079	R4	CY7C1570V18-375BZC	125	5.0	96	96	50	0

**Summary for Technology: R9**

**16 records**

**Sum**

**22237 0**

**R7**

MID	103409	R1	7A122101GC	150	2.3	48	48	3455	0
MID	103409	R2	7A122101GC	150	2.3	48	48	3526	0
MID	103409	R3	7A122101GC-	150	2.3	48	48	3476	0
MID	104907	R1	CY7C1041CV33	150	2.3	24	24	800	0
MID	104907	R2	CY7C1041CV33	150	2.3	48	48	800	0
MID	104907	R3	CY7C1041CV33	150	2.3	24	24	798	0
MID	111410	R1-Split 1	7A134101FC	150	2.3	24	24	444	0
MID	111410	R1-Split 2	7A134101FC	150	2.3	24	24	152	0
MID	111410	R1-Split 2	7A134101FC	150	2.3	48	48	243	0
MID	111804	R1	7A134101FC	150	2.3	24	24	625	0
MID	111804	R1	7A134101FC	150	2.3	48	48	175	0
MID	111804	R3	7A122101GC	150	2.3	24	24	800	0

**Summary for Technology: R7**

**12 records**

**Sum**

**15294 0**

**S4**

MID	100201	R1E	CY23FP12KOXC	150	3.8	48	48	1500	0
CCD	103205	R1	CY8C24494-24PVXI	125	5.25	96	96	1485	0
CCD	MR102072	R1	CY8C27443-24PVXIT	125	5.25	96	96	300	0
CCD	MR102077	R1	CY8C24533-24PVXI	125	5.25	120	120	298	0
CCD	MR103048	R1	CP7164ATT	125	5.25	96	96	300	0

CCD	MR103060	R1	CY8C21534-24PVXI	125	5.25	96	96	261	0
CCD	MR104039	R1	CY8C24533-24PVXI	125	5.25	96	96	760	0
CCD	MR111061	R1	CG7326AAT	125	5.5	96	96	300	0

**Summary for Technology: S4**

**8 records**

**Sum 5204 0**

**R52**

MPD	105206	R1	CY7C199CN	150	3.88	72	72	800	0
MPD	105206	R2	CY7C199CN	150	3.8	72	72	799	0
MPD	105206	R3	CY7C199CN	150	3.8	72	72	799	0
MPD	105206	R3	CY7C199CN	150	3.8	72	72	799	0
MID	111411	R1	7A62128ZHC	150	5.75	24	24	400	0
MID	111412	R4	7A62128ZHC	150	5.75	24	24	400	0
MID	111804	R2	7A1021SFC	150	3.8	24	24	792	0

**Summary for Technology: R52**

**7 records**

**Sum 4789 0**

**R42**

MID	105202	R1	CY62256VLL	150	5.75	48	48	799	0
MID	105202	R2	CY62256NLL-55ZXAT	150	5.75	48	48	800	0
MID	105202	R3	CY62256NLL-55ZXAT	150	5.75	48	48	799	0
MID	105208	R1	CY62256NLL-70SNXA	150	5.75	48	48	799	0
MID	105208	R2	CY62256VNLL-70SNXE	150	5.75	48	48	798	0
MID	105208	R3	7A622574NDC	150	5.75	48	48	800	0
MID	MR102081	R1	CY62256NLL-70SNXA	125	5.75	48	48	4420	0
MID	MR102081	R1	CY62256NLL-70SNXA	125	5.75	72	72	168	0
MID	MR103066	R1	CY62256VNLL-70SNXI	125	5.75	96	96	300	0
MID	MR104074	R1	CY62256NLL-70SNXC	125	5.75	96	96	300	0
MID	MR111060	R1	CY62256VNLL-70SNXIT	125	5.75	96	96	300	0



MID	MR111063	R1	CY62256NLL-55SNXI	125	5.75	96	96	300	0
<b>Summary for Technology: R42</b>		<b>12</b>	<b>records</b>						
<b>Sum</b>								<b>10583</b>	<b>0</b>

## Summary Detail -- LFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
<b>R42</b>												
	MID	105202	R1	CY62256VLL	150	5.75	408	408	76	0		
	MID	105202	R1	CY62256VLL	150	5.75	432	432	3	0		
	MID	105202	R2	CY62256NLL-55ZXAT	150	5.75	408	408	80	0		
	MID	105202	R3	CY62256NLL-55ZXAT	150	5.75	408	408	80	0		
	MID	105208	R1	CY62256NLL-70SNXA	150	5.75	408	408	77	0		
	MID	105208	R2	CY62256VLL-70SNXE	150	5.75	408	408	80	0		
	MID	105208	R3	7A622574NDC	150	5.75	408	408	80	0		
	MID	MR102081	R1	CY62256NLL-70SNXA	125	5.75	1000	1000	300	0		
	MID	MR103066	R1	CY62256VLL-70SNXI	125	5.75	952	952	299	0		
	MID	MR104074	R1	CY62256NLL-70SNXC	125	5.75	1000	1000	300	0		
	MID	MR111060	R1	CY62256VLL-70SNXIT	125	5.75	1000	1000	300	0		
	MID	MR111063	R1	CY62256NLL-55SNXI	125	5.75	1000	1000	300	0		

Summary for Technology: R42

12

records

Sum

1975

0

R8

	MID	MR101043	R1	CY62167DV30LL-55BVI	125	2.4	1000	1000	293	0		
	MID	MR102074	R1A	7G62162DK-**GBZI	125	2.4	1000	1000	299	0		
	MID	MR102079	R1	CY62146DV30LL-55BVI	125	2.4	1000	1000	269	0		
	MID	MR103040	R1	CY62157DV30LL-55BVIT	125	2.4	1000	1000	295	0		
	MID	MR103080	R1	7G62162DK-**GBVI	125	2.4	1000	1000	298	0		
	MID	MR104042	R1	CY62157DV30LL-55BVI	125	2.4	1096	1096	297	0		
	MID	MR111059	R1	CY62157DV30LL-55BVIT	125	2.4	1000	1000	298	0		



MID	MR103082	R1	7C1380XC	150	2.25	500	500	299	0
MID	MR102067	R4	7C1380XC	150	2.25	500	500	296	0
MID	MR112079	R1	CY7C1515JV18-333BZI	125	5.0	5500	5500	50	0
MID	MR112079	R2	CY7C1570V18-375BZC	125	5.0	4500	4500	50	0
MID	MR112079	R3	CY7C1515JV18-333BZI	125	5.0	4500	4500	48	0
MID	MR112079	R4	CY7C1570V18-375BZC	125	5.0	3500	3500	50	0

**Summary for Technology: R9**

**6 records**

**Sum 793 0**

**R52**

MID	105206	R3	CY7C199CN	150	3.8	408	408	80	0
MID	105206	R2	CY7C199CN	150	3.8	408	408	80	0
MID	105206	R1	CY7C199CN	150	3.8	408	408	80	0
MID	104813	R1	CY7C1041BN-15ZXI	150	3.8	500	500	114	0
MID	111804	R2	7A1021SFC	150	3.8	408	408	80	0

**Summary for Technology: R52**

**5 records**

**Sum 434 0**

**S8**

MID	095107	R1A	CY2DP1510AXC	150	2.53	500	500	122	0
MID	100203	R2	CY7C1421B8CC	150	5.25	500	500	178	0
CCD	102607	R1	CY8C20466A-24LQXIES	150	2.1	524	524	389	0
CCD	102607	R2	CY8C20466A-24LQXIES	150	2.1	500	500	390	0
CCD	102607	R3	CY8C20466A-24LQXIES	150	2.1	500	500	390	0
CCD	102607	R4	CY8C20466A-24LQXIES	150	2.1	500	500	400	0
CCD	102607	R5	CY8C20466A-24LQXIES	150	2.1	500	500	390	0
CCD	103605	R1	CY8C20466A-24LQXIES	150	2.1	500	500	390	0
CCD	104403	R1	CY8C20466A-24LQXIES	150	2.1	500	500	120	0
DCD	104703	R1	CYONSFN3000-LBXC	150	2	500	500	234	0

CCD	100101	R1A	CY8CTMA300EES5-48LTXI	150	2.07	500	500	114	0
CCD	100101	R2	CY8CTMA300EES5-48LTXI	150	2.07	500	500	115	0
CCD	MR102075	R1C-Split 1	CY8C20466-24LQXI	150	2.1	500	500	399	0
CCD	MR102076	R1	CY8C20466-24LQXI	150	2.1	500	500	292	0
CCD	MR111068	R1	CY8C20466-24LQXI	150	2.1	500	500	755	0

**Summary for Technology: S8**

**15 records**

**Sum**

**4678 0**

**S4**

MID	100201	R1E	CY23FP12K0XC	150	3.8	500	500	120	0
CCD	MR102072	R1	CY8C27443-24PVXIT	125	5.5	1000	1000	299	0
CCD	MR102077	R1	CY8C24533-24PVXI	125	5.5	1144	1144	298	0
CCD	MR101052	R1	CY8C27443-24PVXIT	125	5.5	1072	1072	298	0
CCD	MR103048	R1	CP7164ATT	125	5.25	1024	1024	299	0
CCD	MR103060	R1	CY8C21534-24PVXI	125	5.25	1000	1000	261	0
CCD	MR104043	R1	CP7164ATT	125	5.25	1000	1000	229	0

**Summary for Technology: S4**

**7 records**

**Sum**

**1804 0**

**R95**

MID	091206	R1	CY621675EV18LL-55BVXI	125	1.85	1000	1000	188	0		
MID	091206	R2	CY621675EV18LL-55BVXI	125	1.85	1000	1000	200	1	091206-2L2	1- Metal1 lines defect
MID	091206	R3	CY621675EV30LL-45BVXI	125	1.85	1000	1000	396	0		
MID	101301	R1	CY62151EV18LL-350ZSXI	125	1.85	1000	1000	405	0		
MID	105211	R1	CY62148ESL	150	1.85	408	408	80	0		
MID	105211	R2	CY62138FV30LL	150	1.85	408	408	80	0		
MID	105211	R3	CY62128ELL	150	1.85	408	408	80	0		
MID	110708	R1	7A62128KC	150	1.85	408	408	80	0		
MID	110708	R2	7A62128KC	150	1.85	408	408	80	0		



MID	110708	R3	7A62128KC	150	1.85	408	408	80	0
MID	111410	R2	7A62126FC	150	1.85	408	408	80	0
MID	111410	R3	7A62126FC	150	1.85	408	408	80	0
MID	111411	R2A	CY62128BNLL-70SXA	150	5.75	408	408	80	0
MID	111411	R3A	CY62128ELL-55ZAXE	150	1.85	408	408	80	0
MID	111411	R4	CY62128ELL-55ZAXE	150	1.85	408	408	80	0
MID	111412	R1	CY62128BNLL-70SXA	150	5.75	408	408	80	0
MID	111412	R2	CY62128ELL-55ZAXE	150	1.85	408	408	80	0
MID	111412	R3	CY62128ELL-55ZAXE	150	1.85	408	408	80	0
MID	111701	R3B	CY621675EV30LL-45BVXI	125	1.85	1000	1000	400	0

**Summary for Technology: R95**

**19 records**

**Sum**

**2709 1**

**R7**

MID	104404	R1A	7A122101GC	150	2.75	500	500	85	0
MID	104404	R1B	7A122101GC-	150	2.75	500	500	84	0
MID	104404	R2A	7A122101GC-	150	2.75	500	500	79	0
MID	104404	R2B	7A122101GC-	150	2.75	500	500	83	0
MID	104404	R3A	7A122101GC-	150	2.75	500	500	81	0
MID	104404	R3B	7A122101GC	150	2.75	500	500	85	0
MID	104805	R2	CY7C1019CV33-15VXC	150	2.3	500	500	116	0
MID	104907	R1	CY7C1041CV33	150	2.3	408	408	100	0
MID	111410	R1	7A134101FC	150	2.3	408	408	79	0
MID	111804	R1	7A134101FC	150	2.3	408	408	80	0
MID	111804	R3	7A122101GC	150	2.3	408	408	78	0

**Summary for Technology: R7**

**11 records**

**Sum**

**950 0**

## Summary Detail -- DRET Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
<b>S4</b>												
	CCD	101203	R2	CY8C24494-24PVXI	150	0	1000	1000	82	0		
	CCD	MR101052	R1	CY8C27243-24PVXIT	175	0	3500	3500	76	0		
	CCD	MR101059	R1	CY8C20434-12LQXIT	175	0	2000	2000	77	0		
	CCD	MR102072	R1	CY8C27443-24PVXIT	150	0	1024	1024	80	0		
	CCD	MR102072	R1	CY8C27443-24PVXIT	175	0	3500	3500	80	0		
	CCD	MR102077	R1	CY8C24533-24PVXI	150	0	1000	1000	80	0		
	CCD	MR102077	R1	CY8C24533-24PVXI	175	0	1524	1524	80	0		
	CCD	MR103048	R1	CP7164ATT	150	0	1000	1000	80	0		
	CCD	MR103048	R1	CP7164ATT	175	0	408	408	78	0		
	CCD	MR103060	R1	CY8C21534-24PVXI	150	0	1024	1024	67	0		
	CCD	MR103060	R1	CY8C21534-24PVXI	175	0	408	408	80	0		
	CCD	MR104039	R1	CY8C24533-24PVXI	150	0	1024	1024	80	0		
	CCD	MR104039	R1	CY8C24533-24PVXI	175	0	432	432	80	0		
	CCD	MR104043	R1	CP7164ATT	150	0	1000	1000	80	0		
	CCD	MR104043	R1	CP7164ATT	175	0	408	408	80	0		
	CCD	MR111062	R1	CG7264AM	150	0	1500	1500	80	0		
	CCD	MR111062	R1	CG7264AM	175	0	408	408	80	0		
<b>Summary for Technology: S4</b>			<b>17</b>	<b>records</b>					<b>1340</b>	<b>0</b>		
<b>Sum</b>												
<b>S8</b>												
	CCD	100101	R1	CY8CTMA300EES5-48LTXI	150	0	1500	1500	77	0		
	CCD	101101	R1A	CY8C3866AXI-040ES3	150	0	1000	1000	80	0		

CCD	102204	R1	CY14B101Q2A-SXI	150	0	1000	1000	80	0
CCD	102406	R1	CY8C20566-24PVXI	150	0	1000	1000	80	0
CCD	102406	R2	CY8C20566-24PVXI	150	0	1000	1000	80	0
CCD	102607	R1	CY8C20466A-24LQXIES	150	0	1500	1500	77	0
CCD	102607	R3	CY8C20466A-24LQXIES	150	0	1500	1500	80	0
CCD	102607	R5	CY8C20466A-24LQXIES	150	0	1500	1500	80	0
MID	102801	R1	CY7C1401B8CC	150	0	500	500	80	0
DCD	104703	R1	CYONSFN3000-LBXC	150	0	1500	1500	77	0
CCD	MR094068	R1	CY8CTMG200-32LQXI	150	0	3500	3500	75	0
CCD	MR102075	R1A	CY8C20466-24LQXI	150	0	1000	1000	80	0
CCD	MR102075	R1A	CY8C20466-24LQXI	175	0	3500	3500	75	0
CCD	MR102076	R1	CY8C20466-24LQXI	150	0	1000	1000	80	0
CCD	MR102076	R1	CY8C20466-24LQXI	175	0	3500	3500	76	0
CCD	MR103067	R1	CY8CTMG200-32LQX	150	0	1000	1000	80	0
CCD	MR103067	R1	CY8CTMG200-32LQX	175	0	3500	3500	78	0
CCD	MR103074	R2	CY8C20466A-24LQXI	150	0	1000	1000	80	0
CCD	MR103074	R2	CY8C20466A-24LQXI	175	0	408	408	77	0
CCD	MR104040	R1	CY8CTMG200-32LQXI	150	0	1000	1000	80	0
CCD	MR104040	R1	CY8CTMG200-32LQXI	175	0	3000	3000	80	0
CCD	MR111068	R1	CY8C20466-24LQXI	150	0	1500	1500	73	0
CCD	MR111068	R1	CY8C20466-24LQXI	175	0	1500	1500	79	0

Summary for Technology: S8

23

records

Sum

1804

0

## APPENDIX D: RELIABILITY DATA



FROM: 7/3/2010

TO: 07/03/2011

### Summary Detail -- HAST Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
<b>FBGA (0.75-0.8, 0.3mm, Pb-free)</b>											
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	130	5.25	264	29	0		
BK48HAGLL	G	MR102064	R1	CY14B104L-BA458XC	110	3.3	128	30	0		
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	130	5.25	264	30	0		
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	130	3.6	264	30	0		
<b>Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)</b>			<b>4</b>	<b>records</b>							
<b>Sum</b>								<b>119</b>	<b>0</b>		
<b>FBGA (1.0-1.27)</b>											
BB165GABLE	RA	MR104057	R1	CY7C1518KV18-333BZC	110	2.05	264	30	0		
<b>Summary for Package Family: FBGA (1.0-1.27)</b>			<b>1</b>	<b>records</b>							
<b>Sum</b>								<b>30</b>	<b>0</b>		
<b>FBGA (1.0-1.27, Pb-free)</b>											
BW165GABLL	RA	103004	R5	7C1514KO-	130	1.98	264	77	0		
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	130	2.05	264	76	0		
BW165DBALE	GQ	110402	R2	CY7C1514KV18-300BZC	130	2.05	264	76	0		
<b>Summary for Package Family: FBGA (1.0-1.27, Pb-free)</b>			<b>3</b>	<b>records</b>							

**Sum** **229** **0**

**PDIP (Pb-Free)**

PZ183DBGN	RA	MR102061	R1	CY7C63813-PXC	130	5.5	128	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	130	5.5	128	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	130	5.25	128	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	130	5.5	128	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	130	5.5	128	30	0

**Summary for Package Family: PDIP (Pb-Free)** **5** **records**

**Sum** **150** **0**

**PLCC (Pb-Free)**

JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	130	5.25	128	25	0
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**Summary for Package Family: PLCC (Pb-Free)** **1** **records**

**Sum** **25** **0**

**QFN (0.6mm, Saw Type, Pb-Free)**

LQ36AAAAAL	L	101108	R3	CY8CTMA300EES-36LQXI	130	5.5	128	77	0
LQ32EPDAGL	RA	102603	R1	CY8C20466A-24LQXIES	130	5.25	128	80	0
LQ32EPDAGL	RA	102607	R1	CY8C20466A-24LQXIES	130	5.5	128	79	5
LQ32EPDAGL	RA	102607	R3	CY8C20466A-24LQXIES	130	5.25	128	80	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	130	5.25	128	73	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	130	5.25	256	40	0
LQ24ABAAL	AT	MR102019	R1	CP7229ATT	130	5.25	128	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	130	5.25	128	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	130	5.25	128	30	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	130	5.0	128	30	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	130	5.5	128	29	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	130	5.25	128	29	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	130	5.25	128	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	130	5.25	128	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	130	5.25	128	30	0

102607-1A1 102607-1A1-passivation crack and delamination of the NSM



LQ36ABAAAL	RA	MR111009	R1	CY8CTMA340-LQI-01T	130	4.0	128	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	130	4.0	128	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	130	5.25	128	30	0
LQ24AAAAAL	RA	NR093005	R14	CP7196ATT	130	5.25	128	30	0
LQ24AAAAAL	RA	NR093005	R15	CP7196ATT	130	5.25	128	30	0

**Summary for Package Family: QFN (0.6mm, Saw Type, Pb-Free) 20 records**

**Sum 847 5**

**QFN (COL, 0.6mm, Saw Type, Pb-free)**

LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	130	5.25	128	27	0
LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	130	5.25	128	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	130	5.25	128	30	0

**Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free) 3 records**

**Sum 87 0**

**QFN (Punch Type, Pb-Free)**

LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	130	3.6	128	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	130	5.25	128	29	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	130	5.25	128	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	130	3.53	128	30	0

**Summary for Package Family: QFN (Punch Type, Pb-Free) 4 records**

**Sum 119 0**

**QFN (Saw Type, Pb-free)**

LT48BAAAAAN	MB	100101	R2	CY8CTMA300EES5-48LTXI	130	5.5	128	80	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	130	5.5	128	77	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	130	5.5	128	76	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	130	5.25	128	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	130	5.25	128	30	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	130	3.63	128	30	0
LT32BABCGL	RA	MR104012	R1	CY8C21434-24LTXI	130	5.25	128	30	0



LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	130	5.25	128	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	130	5.25	128	29	0

**Summary for Package Family: QFN (Saw Type, Pb-free)**

**9 records**

**Sum 412 0**

**QSOP (Pb-Free)**

SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	130	5.5	128	30	0
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**Summary for Package Family: QSOP (Pb-Free)**

**1 records**

**Sum 30 0**

**SNC (Pb-Free)**

SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	130	5.5	128	30	0
SY2831BHN	JT	111401	R1	7A622574NDC	130	3.63	96	39	0

**Summary for Package Family: SNC (Pb-Free)**

**2 records**

**Sum 69 0**

**SOIC (J-Lead)**

V3645BGBLN	JT	110907	R1	7C1549SCC	130	5.5	128	79	0
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**Summary for Package Family: SOIC (J-Lead)**

**1 records**

**Sum 79 0**

**SOIC (J-Lead, Pb-Free)**

VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	130	3.3	128	70	0
VZ32421CLL	JT	104805	R2	CY7C1019CV33-15VXC	130	3.3	128	77	0
VZ28311LLL	JT	105206	R2	CY7C199CN	130	5.5	96	77	0
VZ28311LLL	JT	105206	R3	CY7C199CN	130	5.5	96	77	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	130	3.65	128	29	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	130	5.0	128	27	0
VZ32314BLL	R	MR104027	R1A	CY7C1018DV33-10VXIT	130	3.77	128	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	130	5.0	128	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	130	3.77	128	30	0

**Summary for Package Family: SOIC (J-Lead, Pb-Free)**

**9 records**

**Sum 447 0**

**SOIC (Pb-Free)**

SZ815WAGN	M	103507	R1	CY14C101J2-SXI	130	2.5	128	77	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	130	3.3	128	80	0
SZ32457LN	R	110708	R1	7A62128KC	130	3.6	96	77	0
SZ32457LN	R	110708	R2	7A62128KC	130	3.6	96	77	0
SZ32457LN	R	110708	R3	7A62128KC	130	3.6	96	77	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	130	5.5	128	80	0
SZ324513AN	JT	111411	R1	7A62128ZHC	130	5.5	96	80	0
SZ32457ALN	JT	111411	R2	7A62128KC	130	3.6	96	80	0
SZ32457ALN	JT	111411	R3	7A62128KC	130	3.6	96	80	0
SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	130	5.5	96	100	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	130	3.6	96	100	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	130	3.6	96	100	0
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	130	5.0	96	29	0
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	130	5.5	128	30	0
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	130	5.5	96	30	0
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	130	5.25	128	30	0
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	130	3.6	128	30	0
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	130	3.63	128	30	0
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	130	5.25	128	30	0
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	130	5.5	128	30	0
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	130	5.0	128	30	0
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	130	5.25	128	30	0
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	130	5.25	128	30	0
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	130	5.5	128	30	0
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	130	3.63	128	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	130	3.63	128	27	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	130	5.25	128	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	130	5.25	128	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	130	5.5	96	30	0
SZ1615KDG N	RA	MR112010	R1	CY2292FXC	130	3.8	128	30	0

Summary for Package Family: SOIC (Pb-Free)

30 records



**Sum** **1544** **0**

**SSOP (Pb-Free)**

SP483MBBGN	RA	101208	R1	CY8C3866PVI-021ES2	130	3.3	128	75	0
SP282ABAGN	RA	103205	R1	CY8C24494-24PVXI	130	5.25	128	80	0
SP282ABBGN	RA	103205	R2	CY8C21534-24PVXI	130	5.25	128	80	0
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	130	3.3	128	79	0
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	130	5.25	128	30	0
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	130	5.25	128	30	0
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	130	5.25	128	30	0
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	130	5.25	128	30	0

**Summary for Package Family: SSOP (Pb-Free)** **8** **records**

**Sum** **434** **0**

**TQFP (Pb-Free)**

AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	130	3.63	128	30	0
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**Summary for Package Family: TQFP (Pb-Free)** **1** **records**

**Sum** **30** **0**

**TSOP (Pb-free)**

ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	130	3.6	128	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	130	3.6	128	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	130	3.6	128	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	130	3.6	128	29	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	130	3.63	128	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	130	3.3	128	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	130	5.5	128	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	130	3.6	128	29	0

**Summary for Package Family: TSOP (Pb-free)** **8** **records**

**Sum** **238** **0**

**TSOP I (Pb-Free)**

ZB32RHBLN	JT	105211	R1	CY62148ESL	130	3.6	96	80	0
ZB32RHABL N	JT	105211	R2	CY62138FV30LL	130	3.6	96	80	0
ZB32RHABL N	JT	105211	R3	CY62128ELL	130	3.6	96	80	0

ZB32RHBALN	R	MR094030	R1	CY62128EV30LL-45ZAXI	130	3.6	128	30	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	130	3.6	128	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	130	3.6	128	30	0
ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	130	3.6	128	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	130	3.6	128	27	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	130	3.6	128	30	0

**Summary for Package Family: TSOP I (Pb-Free)**

**9 records**

**Sum 417 0**

**TSOP II (Pb-Free)**

ZW444YBCLL	JT	104814	R1	CY7C1041BN-15ZXI	130	5.5	128	77	0
ZW444AICLL	JT	104814	R2	CY7C1021DV33-10ZSXI	130	3.65	128	77	0
ZW444AKCLN	R	104907	R1	CY7C1041CV33	130	3.65	96	100	0
ZW444AKCLN	R	104907	R2	CY7C1041CV33	130	3.65	96	100	0
ZW444AKCLN	R	104907	R3	CY7C1041CV33	130	3.65	96	99	0
ZW444WBCLN	R	110703	R4	CG6722AM	130	3.65	128	30	0
ZW444AKDLN	JT	111410	R1	7A134101FC	130	3.6	96	80	0
ZW444AHILL	JT	111410	R2	7A62126FC	130	3.6	96	80	0
ZW444AHILL	JT	111410	R3	7A62126FC	130	3.6	96	80	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	130	3.6	128	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	130	3.65	128	30	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	130	3.6	128	30	0

**Summary for Package Family: TSOP II (Pb-Free)**

**12 records**

**Sum 813 0**

**TSSOP (Pb-Free)**

ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	130	3.8	128	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	130	3.63	128	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	130	3.63	128	30	0

**Summary for Package Family: TSSOP (Pb-Free)**

**3 records**

**Sum 90 0**

**VFBGA (0.75-0.8, 0.3mm)**

BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	130	5.5	264	30	0
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**Summary for Package Family: VFBGA (0.75-0.8, 0.3mm)**

**1 records**

**Sum 30 0**

**VFBGA (0.75-0.8, 0.3mm, Pb-Free)**

BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	110	3.6	264	75	0
BZ48ZBAALL	RA	091206	R2	CY621675EV18LL-55BVXI	110	3.63	264	80	0
BZ48ZBAALL	RA	091206	R3	CY621675EV30LL-45BVXI	130	3.6	264	79	0
BZ48CNAALL	G	103206	R1	CY7C62162DK	110	3.6	264	49	0
BZ48CNAALL	G	103206	R2	CY62162DK	110	3.6	264	50	0
BZ48RMAALL	RA	104406	R4	CY7C1061DV33-10BVXI	110	3.65	264	80	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	110	3.6	264	30	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	110	3.6	128	30	0
BZ48ZEAAL	RA	MR103046	R1	CG6833AM	110	3.6	264	29	0
BZ48ZEAAL	RA	MR104005	R1	CG6833AMT	110	5.5	264	30	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	110	3.6	264	30	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	130	3.6	264	30	0

**Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)**

**12 records**

**Sum 592 0**

## Summary Detail -- HTS Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
<b>FBGA (0.75-0.8, 0.3mm, Pb-free)</b>											
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	150	0	500	77	0		
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	150	0	1000	77	0		
BK48PAALL	RA	104107	R4	CY14B104LA-BA25XI	150	0	500	77	0		
BK48PAALL	RA	104107	R4	CY14B104LA-BA25XI	150	0	1000	77	0		
BK48HAGLL	G	MR102064	R1	CY14B104L-BA458XC	150	0	1000	30	0		
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	150	0	500	30	0		
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	150	0	1000	30	0		
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	150	0	500	30	0		
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	150	0	1000	30	0		
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	150	0	500	30	0		
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	150	0	1000	30	0		
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	150	0	500	30	0		
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	150	0	1000	30	0		
<b>Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)</b>			<b>13</b>	<b>records</b>							
<b>Sum</b>								<b>578</b>	<b>0</b>		
<b>FBGA (1.0-1.27)</b>											
BB165GAALE	RA	MR102046	R1	CY7C1514KV18-250BZI	150	0	1000	30	0		
BB165BUALE	G	MR102047	R1	CY7C1514KV18-300BZI	150	0	1000	30	0		
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	150	0	500	30	0		
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	150	0	1000	29	0		
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	150	0	500	30	0		
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	150	0	1000	30	0		
BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	150	0	500	30	0		



BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	150	0	1000	30	0
BB165GABLE	RA	MR104057	R1	CY7C1518KV18-333BZC	150	0	500	30	0
BB165GABLE	RA	MR104057	R1	CY7C1518KV18-333BZC	150	0	1000	30	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	150	0	500	30	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	150	0	1000	26	0

**Summary for Package Family: FBGA (1.0-1.27)**

**12 records**

**Sum 355 0**

**FBGA (1.0-1.27, Pb-free)**

BW165RFALL	RA	103308	R1	CY7C1612KO	150	0	500	76	0
BW165RFALL	RA	103308	R1	CY7C1612KO	150	0	1000	74	0
BW165RFALL	RA	103308	R1	CY7C1612KO	150	0	1500	66	0
BW165RFALL	RA	103308	R4	CY7C1612KO	150	0	500	77	0
BW165RFALL	RA	103308	R4	CY7C1612KO	150	0	1000	76	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	150	0	500	77	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	150	0	1000	77	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	150	0	1500	77	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	150	0	500	30	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	150	0	1000	30	0

**Summary for Package Family: FBGA (1.0-1.27, Pb-free)**

**10 records**

**Sum 660 0**

**FLIPCHIP CSP (Pb-Free)**

FN81B	C	103604	R1	CYWB0226ABSX-FDXIT	150	0	500	80	0
FN81B	C	103604	R1	CYWB0226ABSX-FDXIT	150	0	1000	80	0

**Summary for Package Family: FLIPCHIP CSP (Pb-Free)**

**2 records**

**Sum 160 0**

**PBGA (1.27)**

BG119ADALE	AT	MR102056	R1	CY7C1361C-100BGC	150	0	1000	30	0
BG119QALE	G	MR102066	R1	CY7C1347S-166BGC	150	0	1000	30	0

**Summary for Package Family: PBGA (1.27)**

**2 records**

**Sum** **60** **0**

**PBGA (Cavity/Heat Sink)**

BL256L2GE	G	MR104082	R1	7B9293CC	150	0	500	30	0
BL256L2GE	G	MR104082	R1	7B9293CC	150	0	1000	30	0

**Summary for Package Family: PBGA (Cavity/Heat Sink)** **1** **records**

**Sum** **30** **0**

**PBGA (Cavity/Heat Sink, Pb-free)**

BJ256L2GL	G	MR102054	R1	CYP15G0401DXB-BGX1	150	0	1000	30	0
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**Summary for Package Family: PBGA (Cavity/Heat Sink, Pb-free)** **1** **records**

**Sum** **30** **0**

**PDIP (Pb-Free)**

PZ183DBGN	RA	MR102061	R1	CY7C63813-PXC	150	0	1000	30	0
PZ243AAAGN	X	MR102062	R1	CY7C63743C-PXC	150	0	1000	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	150	0	500	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	150	0	1000	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	150	0	500	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	150	0	1000	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	150	0	500	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	150	0	1000	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	150	0	500	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	150	0	1000	30	0
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	150	0	500	30	0
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	150	0	1000	30	0
PZ286EAAGN	X	MR112049	R1	CY62256NLL-70PXC	150	0	500	30	0

**Summary for Package Family: PDIP (Pb-Free)** **13** **records**

**Sum** **390** **0**

**PLCC**

J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	150	0	1000	30	0
J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	150	0	500	30	0



J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	150	0	500	30	0
J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	150	0	1000	30	0
<b>Summary for Package Family: PLCC</b>			<b>4</b>	<b>records</b>					
<b>Sum</b>								<b>120</b>	<b>0</b>
<b>PLCC (Pb-Free)</b>									
JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	150	0	500	30	0
JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	150	0	1000	30	0
<b>Summary for Package Family: PLCC (Pb-Free)</b>			<b>2</b>	<b>records</b>					
<b>Sum</b>								<b>60</b>	<b>0</b>
<b>PQFP (Pb-free)</b>									
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	150	0	500	30	0
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	150	0	1000	30	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	150	0	500	30	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	150	0	1000	30	0
<b>Summary for Package Family: PQFP (Pb-free)</b>			<b>4</b>	<b>records</b>					
<b>Sum</b>								<b>120</b>	<b>0</b>
<b>QFN (0.6mm, Saw Type, Pb-Free)</b>									
LQ36AAAAAL	L	101108	R1	CY8CTMA300EES-36LQXI	150	0	1000	80	0
LQ36AAAAAL	L	104807	R4	CY8CTMA300EES-36LQXI	150	0	1000	80	0
LQ24ABAAL	AT	MR102019	R1	CP7229ATT	150	0	500	30	0
LQ24ABAAL	AT	MR102019	R1	CP7229ATT	150	0	1000	30	0
LQ36AAAAAN	M	MR102063	R1	CG7269AMT	150	0	1000	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	150	0	500	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	150	0	1000	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	150	0	500	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	150	0	1000	30	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	150	0	500	30	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	150	0	1000	30	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	150	0	500	30	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	150	0	1000	30	0

LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	150	0	500	30	0
LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	150	0	1000	30	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	150	0	500	30	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	150	0	1000	30	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	150	0	500	30	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	150	0	1000	30	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	150	0	500	30	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	150	0	1000	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	150	0	500	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	150	0	1000	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	150	0	500	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	150	0	1000	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	150	0	500	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	150	0	1000	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	150	0	500	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	150	0	1000	30	0
LQ36ABAAAL	RA	MR111009	R1	CY8CTMA340-LQI-01T	150	0	500	30	0
LQ36ABAAAL	RA	MR111009	R1	CY8CTMA340-LQI-01T	150	0	1000	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	150	0	500	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	150	0	1000	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	150	0	500	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	150	0	1000	30	0

Summary for Package Family: QFN (0.6mm, Saw Type, Pb-Free)

35 records

Sum 1150 0

QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16ABAALL	L	104205	R1	CP7194AT	150	0	500	80	0
LG16ABAALL	L	104205	R1	CP7194AT	150	0	1000	80	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	150	0	500	30	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	150	0	1000	30	0
LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	150	0	500	30	0





LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	150	0	1000	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	150	0	500	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	150	0	1000	30	0
<b>Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)</b>			<b>8</b>	<b>records</b>					

**Sum** **340** **0**

**QFN (Punch Type, Pb-Free)**

LY40CGAGR	L	MR102044	R1	CYRF69213-40LFXC	150	0	1000	30	0
LY68AGABGL	L	MR102048	R1	CS6656AAT	150	0	1000	29	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	150	0	500	30	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	150	0	1000	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	150	0	500	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	150	0	1000	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	150	0	500	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	150	0	1000	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	150	0	500	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	150	0	1000	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	150	0	500	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	150	0	1000	30	0

**Summary for Package Family: QFN (Punch Type, Pb-Free)** **12** **records**

**Sum** **359** **0**

**QFN (Saw Type, Pb-free)**

LT68CAAAAL	CA	101401	R1	CY8C3866LTI-030ES2	150	0	500	85	0
LT68CAAAAL	CA	101401	R1	CY8C3866LTI-030ES2	150	0	1000	85	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	150	0	500	77	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	150	0	1000	76	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	150	0	500	80	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	150	0	1000	80	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	150	0	1500	80	0
LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	150	0	500	30	0

LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	150	0	1000	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	150	0	500	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	150	0	1000	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	150	0	500	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	150	0	1000	30	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	150	0	500	28	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	150	0	1000	28	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	150	0	500	30	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	150	0	1000	30	0
LT32BABCGL	RA	MR104012	R1	CY8C21434-24LTXI	150	0	500	30	0
LT32BABCGL	RA	MR104012	R1	CY8C21434-24LTXI	150	0	1000	30	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	150	0	500	30	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	150	0	1000	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	150	0	500	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	150	0	1000	30	0
LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	150	0	500	30	0
LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	150	0	1000	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	150	0	500	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	150	0	1000	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	150	0	500	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	150	0	1000	30	0

Summary for Package Family: QFN (Saw Type, Pb-free)

29 records

Sum 1219 0

QSOP (Pb-Free)

SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	150	0	500	30	0
SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	150	0	1000	30	0
SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	150	0	500	30	0
SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	150	0	1000	30	0

Summary for Package Family: QSOP (Pb-Free)

4 records

Sum 120 0



**SNC (Pb-Free)**

SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	150	0	500	80	0
SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	150	0	1000	80	0
SY2831BHN	JT	105208	R1	CY62256NLL-70SNXA	150	0	1000	77	0
SY2831BHN	JT	111401	R4	CY62256NLL-70SNXA	150	0	1000	77	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	150	0	500	30	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	150	0	1000	30	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	150	0	500	30	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	150	0	1000	30	0

**Summary for Package Family: SNC (Pb-Free)**

**8 records**

**Sum 434 0**

**SOIC (J-Lead)**

V3645BGBLN	JT	110907	R1	7C1549SCC	150	0	500	80	0
V3645BGBLN	JT	110907	R1	7C1549SCC	150	0	1000	80	0

**Summary for Package Family: SOIC (J-Lead)**

**2 records**

**Sum 160 0**

**SOIC (J-Lead, Pb-Free)**

VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	150	0	500	77	0
VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	150	0	1000	77	0
VZ28311LLL	JT	105206	R1	CY7C199CN	150	0	1000	77	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	150	0	500	30	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	150	0	1000	30	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	150	0	500	30	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	150	0	1000	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	150	0	500	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	150	0	1000	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	150	0	500	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	150	0	1000	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	150	0	500	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	150	0	1000	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	150	0	500	30	0



VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0
<b>Summary for Package Family: SOIC (J-Lead, Pb-Free)</b>			<b>15</b>	<b>records</b>					
<b>Sum</b>								<b>591</b>	<b>0</b>
<b>SOIC (Pb-Free)</b>									
SZ815WAGN	M	103507	R2	CY14B101Q2A-SXI	150	0	500	77	0
SZ815WAGN	M	103507	R2	CY14B101Q2A-SXI	150	0	1000	77	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	150	0	500	79	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	150	0	1000	79	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	150	0	1500	79	0
SZ32457LN	R	110708	R1	7A62128KC	150	0	1000	76	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	150	0	500	80	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	150	0	1000	80	0
SZ324513AN	JT	111411	R1	7A62128ZHC	150	0	1000	80	0
SZ324513AN	JT	111411	R2A	CY62128BNLL-70SXA	150	0	1000	100	0
SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	150	0	1000	100	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	150	0	1000	100	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	150	0	1000	100	0
SZ815PAFGN	RA	MR102016	R1	CY2305SXI-1HT	150	0	1000	30	0
SZ1615DGN	M	MR102049	R1	CG7192AM	150	0	1000	30	0
SZ1615FAL	T	MR102055	R1	CY7C63803-SXC	150	0	1000	30	0
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	150	0	500	30	0
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	150	0	1000	30	0
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	150	0	1000	30	0
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	150	0	500	30	0
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	150	0	1000	30	0
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	150	0	500	30	0
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	150	0	1000	29	0
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	150	0	500	30	0
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	150	0	1000	30	0
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	150	0	500	30	0

SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	150	0	1000	30	0
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	150	0	500	30	0
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	150	0	1000	30	0
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	150	0	500	30	0
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	150	0	1000	30	0
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	150	0	500	30	0
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	150	0	1000	30	0
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	150	0	500	30	0
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	150	0	1000	30	0
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	150	0	500	30	0
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	150	0	1000	30	0
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	150	0	500	30	0
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	150	0	1000	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	150	0	500	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	150	0	1000	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	150	0	500	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	150	0	1000	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	150	0	500	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	150	0	1000	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	150	0	1000	30	0
SZ1615KDGN	RA	MR112010	R1	CY2292FXC	150	0	500	30	0
SZ1615KDGN	RA	MR112010	R1	CY2292FXC	150	0	1000	30	0

Summary for Package Family: SOIC (Pb-Free)

48 records

Sum 2156 0

SSOP (Pb-Free)

SP563GAAGL	R	101205	R1	CY8C28000-24PVXI	150	0	1000	80	0
SP563GAAGL	R	101205	R1	CY8C28000-24PVXI	150	0	1500	80	0
SP483MBBGN	RA	101208	R1	CY8C3866PVI-021ES2	150	0	500	76	0
SP483MBBGN	RA	101208	R1	CY8C3866PVI-021ES2	150	0	1000	76	0
SP483ACGAN	R	102306	R1	CY8C20546-24PVXI	150	0	1000	90	0
SP483ACGAN	R	102306	R1	CY8C20546-24PVXI	150	0	1500	85	0

SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	150	0	500	80	0
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	150	0	1000	80	0
SP483HAAGR	M	MR102043	R1	CY14B101L-SP45XCT	150	0	1000	30	0
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	150	0	1000	30	0
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	150	0	500	30	0
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	150	0	1000	30	0
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	150	0	500	30	0
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	150	0	1000	30	0
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	150	0	500	30	0
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	150	0	1000	30	0
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	150	0	500	30	0
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	150	0	1000	30	0
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	150	0	500	30	0
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	150	0	1000	30	0

Summary for Package Family: SSOP (Pb-Free)

20 records

Sum 1007 0

TQFP (Pb-Free)

AZ100AGAL	G	MR102065	R1	CY7C008V-25AXC	150	0	1000	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	150	0	500	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	150	0	1000	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	150	0	500	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	150	0	1000	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	150	0	500	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	150	0	1000	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	150	0	500	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	150	0	1000	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	150	0	500	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	150	0	1000	30	0
AZ160SBGAL	G	MR112037	R1	CY37256P160-83AXC	150	0	500	30	0
AZ160SBGAL	G	MR112037	R1	CY37256P160-83AXC	150	0	1000	30	0

Summary for Package Family: TQFP (Pb-Free)

13 records

**Sum** **390** **0**

**TSOP (Pb-free)**

ZT28R2ABGN	JT	105202	R1	CY62256VLL	165	0	1000	80	0
ZT32RABALL	T	MR102037	R1	CY62138FV30LL-45ZXI	150	0	1000	30	0
ZT28R4BGL	R	MR102053	R1	CY7C1399BNL-12ZXCT	150	0	1000	30	0
ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	150	0	500	30	0
ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	150	0	1000	30	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	150	0	500	30	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	150	0	1000	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	150	0	500	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	150	0	1000	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	150	0	500	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	150	0	1000	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	150	0	500	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	150	0	1000	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	150	0	500	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	150	0	1000	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	150	0	500	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	150	0	1000	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	150	0	500	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	150	0	1000	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	150	0	500	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	150	0	1000	30	0

**Summary for Package Family: TSOP (Pb-free)** **21** **records**

**Sum** **680** **0**

**TSOP I (Pb-Free)**

ZB32RHBLN	JT	105211	R1	CY62148ESL	150	0	1000	80	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	150	0	500	30	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	150	0	1000	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	150	0	500	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	150	0	1000	30	0

ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	150	0	500	30	0
ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	150	0	1000	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	150	0	500	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	150	0	1000	30	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	150	0	500	30	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	150	0	1000	30	0

**Summary for Package Family: TSOP I (Pb-Free)**

**11 records**

**Sum 380 0**

**TSOP II (Pb-Free)**

ZW444AKCLN	R	104907	R1	CY7C1041CV33	150	0	1000	100	0
ZW444WBCLN	R	110703	R4	CG6722AM	150	0	500	29	0
ZW444WBCLN	R	110703	R4	CG6722AM	150	0	1000	29	0
ZW444AKDLN	JT	111410	R1	7A134101FC	150	0	1000	80	0
ZW444AHILL	JT	111410	R3	7A62126FC	150	0	1000	79	0
ZW544AALL	G	MR102050	R1	CY7C1069AV33-10ZXC	150	0	1000	30	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	150	0	500	30	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	150	0	1000	30	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	150	0	500	30	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	150	0	1000	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	150	0	500	29	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	150	0	1000	29	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	150	0	500	30	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	150	0	1000	30	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	150	0	500	30	0

**Summary for Package Family: TSOP II (Pb-Free)**

**15 records**

**Sum 615 0**

**TSSOP**

Z2412XAGB	M	MR102017	R1	W232-10XT	150	0	1000	30	0
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**Summary for Package Family: TSSOP**

**1 records**

**Sum 30 0**

**TSSOP (Pb-Free)**



ZZ1620GBAN	RA	MR102001	R1	CY2309ZXC-1HT	150	0	1000	30	0
ZZ2014BGN	T	MR102058	R1	CY25404ZXI-005T	150	0	1000	30	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	150	0	500	30	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	150	0	1000	30	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	150	0	500	29	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	150	0	1000	29	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	150	0	500	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	150	0	1000	30	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	150	0	500	30	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	150	0	1000	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	150	0	500	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	150	0	1000	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	150	0	500	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	150	0	1000	30	0
ZZ2014BGN	T	MR112047	R1	CY25404ZXI-003T	150	0	500	30	0

**Summary for Package Family: TSSOP (Pb-Free)**

**15 records**

**Sum 448 0**

**VFBGA (0.75-0.8, 0.3mm)**

BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	150	0	500	30	0
BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	150	0	1000	30	0

**Summary for Package Family: VFBGA (0.75-0.8, 0.3mm)**

**2 records**

**Sum 60 0**

**VFBGA (0.75-0.8, 0.3mm, Pb-Free)**

BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	150	0	500	80	0
BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	150	0	1000	80	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	150	0	500	30	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	150	0	1000	30	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	150	0	500	30	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	150	0	1000	30	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	150	0	1000	30	0

BZ48ZEAALE	RA	MR103046	R1	CG6833AM	150	0	500	29	0
BZ48ZEAALE	RA	MR103046	R1	CG6833AM	150	0	1000	29	0
BZ48ZEAALE	RA	MR104005	R1	CG6833AMT	150	0	500	29	0
BZ48ZEAALE	RA	MR104005	R1	CG6833AMT	150	0	1000	29	0
BZ100BABLL	RA	MR104011	R1	CYDM128B16-55BVXIT	150	0	500	30	0
BZ100BABLL	RA	MR104011	R1	CYDM128B16-55BVXIT	150	0	1000	30	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	150	0	500	30	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	150	0	1000	30	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	150	0	500	30	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	150	0	1000	29	0
BZ48ABBBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	150	0	500	30	0
BZ48ABBBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	150	0	1000	30	0

Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)

19

records

Sum

665

0



## Summary Detail -- PCT Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS	
<b>FBGA (0.75-0.8, 0.3mm, Pb-free)</b>												
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	121	0	168	77	0			
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	121	0	288	77	0			
BK48DJALL	G	MR094034	R1A	CY62177DV30LL-55BAXI	121	0	288	30	0			
BK48HAGLL	G	MR102064	R1	CY14B104L-BA458XC	121	0	288	28	0			
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	121	0	168	30	0			
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	121	0	288	30	0			
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	121	0	168	30	0			
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	121	0	288	26	0			
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	121	0	168	30	0			
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	121	0	288	30	0			
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	121	0	168	30	0			
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	121	0	288	30	0			
<b>Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)</b>			<b>12</b>	<b>records</b>								
<b>Sum</b>								<b>448</b>	<b>0</b>			
<b>FBGA (1.0-1.27)</b>												
BB165RJALE	RA	095106	R1A	CY7C1412KO	121	0	96	80	0			
BB165RJALE	RA	095106	R1A	CY7C1412KO	121	0	168	80	0			
BB165RNALE	RA	100901	R1C	CY7C1313KO	121	0	24	14	0			
BB165RNALE	RA	100901	R1C	CY7C1313KO	121	0	96	79	0			
BB165RNALE	RA	100901	R1C	CY7C1313KO	121	0	168	79	0			
BB165GAALE	RA	102608	R11	7C1568KO	121	0	16824	17	0			
BB165GAALE	RA	102608	R13	7C15632KO	121	0	16824	5	0			
BB165DELLE	GQ	110402	R1	CY7C14141KV18	121	0	168	80	0			
BB165DELLE	GQ	110402	R1	CY7C14141KV18	121	0	288	80	0			

BB165GAALE	RA	MR102046	R1	CY7C1514KV18-250BZI	121	0	288	26	0
BB165BUALE	G	MR102047	R1	CY7C1514KV18-300BZI	121	0	288	26	0
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	121	0	168	26	0
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	121	0	288	26	0
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	121	0	168	27	0
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	121	0	288	27	0
BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	121	0	168	30	0
BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	121	0	288	30	0
BB165GABLE	RA	MR104057	R1A	CY7C1518KV18-300BZC	121	0	168	30	0
BB165GABLE	RA	MR104057	R1A	CY7C1518KV18-300BZC	121	0	288	30	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	121	0	168	28	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	121	0	288	28	0

Summary for Package Family: FBGA (1.0-1.27)

21 records

Sum 848 0

FBGA (1.0-1.27, Pb-free)

BW165RNALL	RA	100901	R2	CY7C11739KO	121	0	96	77	0
BW165RNALL	RA	100901	R2	CY7C11739KO	121	0	168	77	0
BW165GAALL	RA	102608	R12	7C1512KO	121	0	16824	2	0
BW165RFALL	RA	103308	R1	CY7C1612KO	121	0	168	75	0
BW165RFALL	RA	103308	R1	CY7C1612KO	121	0	288	72	0
BW165RFALL	RA	103308	R2	CY7C1612KO	121	0	168	73	0
BW165RFALL	RA	103308	R2	CY7C1612KO	121	0	288	73	0
BW165RFALL	RA	103904	R1	7C1614KO-	121	0	168	80	0
BW165RFALL	RA	103904	R2	7C1614KO-	121	0	168	80	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	121	0	168	77	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	121	0	288	76	0
BW165GAALL	RA	104602	R1	CY7C1512KV18-300BZXC	121	0	96	77	0
BW165GAALL	RA	104602	R1	CY7C1512KV18-300BZXC	121	0	168	77	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	121	0	168	30	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	121	0	288	29	0

Summary for Package Family: FBGA (1.0-1.27, Pb-free)

15 records

**Sum** **975** **0**

**FLIPCHIP CSP (Pb-Free)**

FN81B	C	103604	R1	CYWB0226ABSX-FDXIT	121	0	96	79	0
FN81B	C	103604	R2	7C07101	121	0	96	78	0
FN81B	C	103604	R3	7C07101	121	0	96	78	0

**Summary for Package Family: FLIPCHIP CSP (Pb-Free)** **3** **records**

**Sum** **235** **0**

**PBGA (1.27)**

BG119QALE	G	MR102066	R1	CY7C1347S-166BGC	121	0	288	29	0
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**Summary for Package Family: PBGA (1.27)** **1** **records**

**Sum** **29** **0**

**PBGA (Cavity/Heat Sink)**

BL256L2GE	G	MR104082	R1	7B9293CC	121	0	168	30	0
BL256L2GE	G	MR104082	R1	7B9293CC	121	0	288	30	0

**Summary for Package Family: PBGA (Cavity/Heat Sink)** **2** **records**

**Sum** **60** **0**

**PDIP (Pb-Free)**

PZ183DBGN	RA	MR102061	R1	CY7C63813-PXC	121	0	288	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	121	0	168	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	121	0	288	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	121	0	168	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	121	0	288	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	121	0	168	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	121	0	288	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	121	0	168	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	121	0	288	30	0
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	121	0	168	30	0
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	121	0	288	30	0
PZ286EAAGN	X	MR112049	R1	CY62256NLL-70PXC	121	0	168	30	0



PZ286EAAGN	X	MR112049	R1	CY62256NLL-70PXC	121	0	288	30	0
<b>Summary for Package Family: PDIP (Pb-Free)</b>			<b>13</b>	<b>records</b>					
<b>Sum</b>								<b>390</b>	<b>0</b>
<b>PLCC</b>									
J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	121	0	168	30	0
J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	121	0	288	30	0
J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	121	0	168	30	0
J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	121	0	288	30	0
<b>Summary for Package Family: PLCC</b>			<b>4</b>	<b>records</b>					
<b>Sum</b>								<b>120</b>	<b>0</b>
<b>PLCC (Pb-Free)</b>									
JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	121	0	168	30	0
JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	121	0	288	30	0
<b>Summary for Package Family: PLCC (Pb-Free)</b>			<b>2</b>	<b>records</b>					
<b>Sum</b>								<b>60</b>	<b>0</b>
<b>PQFP (Pb-free)</b>									
NZ52DXGAN	G	103104	R1	CY7C136-55NXC	121	0	168	60	0
NZ52DXGAN	G	103104	R1	CY7C136-55NXC	121	0	168	30	0
NZ52DXGAN	G	103104	R1	CY7C136-55NXC	121	0	288	60	0
NZ52DXGAN	G	103104	R1	CY7C136-55NXC	121	0	288	30	0
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	121	0	168	24	0
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	121	0	288	24	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	121	0	168	30	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	121	0	288	30	0
<b>Summary for Package Family: PQFP (Pb-free)</b>			<b>8</b>	<b>records</b>					
<b>Sum</b>								<b>288</b>	<b>0</b>
<b>QFN (0.6mm, Saw Type, Pb-Free)</b>									
LQ36AAAAAL	L	101108	R1	CY8CTMA300EES-36LQXI	121	0	288	80	0
LQ36AAAAAL	L	101108	R2	CY8CTMA300EES-36LQXI	121	0	288	80	0
LQ32EPDAGL	RA	102603	R1	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102603	R1	CY8C20466A-24LQXIES	121	0	288	80	0

LQ32EPDAGL	RA	102603	R2	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102603	R2	CY8C20466A-24LQXIES	121	0	288	80	0
LQ32EPDAGL	RA	102607	R1	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102607	R1	CY8C20466A-24LQXIES	121	0	288	76	0
LQ32EPDAGL	RA	102607	R2	CY8C20466A-24LQXIES	121	0	168	77	0
LQ32EPDAGL	RA	102607	R2	CY8C20466A-24LQXIES	121	0	288	77	0
LQ32EPDAGL	RA	102607	R3	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102607	R3	CY8C20466A-24LQXIES	121	0	288	80	0
LQ32EPDAGL	RA	102607	R4	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102607	R4	CY8C20466A-24LQXIES	121	0	288	80	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	121	0	168	80	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	121	0	288	80	0
LQ32EPDAGL	RA	103605	R1	CY8C20466A-24LQXIES	121	0	168	79	0
LQ32EPDAGL	RA	103605	R1	CY8C20466A-24LQXIES	121	0	288	79	0
LQ32EPDAGL	RA	103605	R2	CY8C20466A-24LQXIES	121	0	168	79	0
LQ32EPDAGL	RA	103605	R2	CY8C20466A-24LQXIES	121	0	288	78	0
LQ36AAAAAN	M	MR102063	R1	CG7269AMT	121	0	288	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	121	0	168	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	121	0	288	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	121	0	168	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	121	0	288	30	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	121	0	168	29	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	121	0	288	29	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	121	0	168	30	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	121	0	288	30	0
LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	121	0	168	30	0
LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	121	0	288	30	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	121	0	168	30	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	121	0	288	30	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	121	0	168	30	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	121	0	288	30	0

LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	121	0	168	30	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	121	0	288	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	121	0	168	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	121	0	288	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	121	0	168	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	121	0	288	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	121	0	168	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	121	0	288	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	121	0	168	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	121	0	288	30	0
LQ36ABAAAL	RA	MR111009	R1A	CY8CTMA340-LQI-01T	121	0	168	30	0
LQ36ABAAAL	RA	MR111009	R1A	CY8CTMA340-LQI-01T	121	0	288	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	121	0	168	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	121	0	288	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	121	0	168	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	121	0	288	30	0

Summary for Package Family: QFN (0.6mm, Saw Type, Pb-Free)

51 records

Sum 2513 0

QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AAAAL	MB	104001	R1	CP7194AT	121	0	168	80	0
LG16ABAALL	L	104205	R1	CP7194AT	121	0	168	80	0
LG16ABAALL	L	104205	R1	CP7194AT	121	0	288	79	0
LG16AAAAL	MB	110103	R1	CP7194AT	121	0	168	100	0
LG16AAAAL	MB	110103	R1	CP7194AT	121	0	288	89	0
LG16AAAAL	MB	110103	R2	CP7194AT	121	0	168	100	0
LG16AAAAL	MB	110103	R2	CP7194AT	121	0	288	90	0
LG16AAAAL	MB	110103	R3	CP7194AT	121	0	168	99	0
LG16AAAAL	MB	110103	R3	CP7194AT	121	0	288	88	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	121	0	168	30	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	121	0	288	30	0





LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	121	0	168	30	0
LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	121	0	288	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	121	0	168	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	121	0	288	27	0
<b>Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)</b>			<b>15</b>	<b>records</b>					
<b>Sum</b>								<b>982</b>	<b>0</b>

**QFN (Punch Type, Pb-Free)**

LY68AGABGL	L	MR102048	R1	CS6656AAT	121	0	288	30	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	121	0	168	30	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	121	0	288	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	121	0	168	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	121	0	288	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	121	0	168	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	121	0	288	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	121	0	168	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	121	0	288	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	121	0	168	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	121	0	288	30	0
<b>Summary for Package Family: QFN (Punch Type, Pb-Free)</b>			<b>11</b>	<b>records</b>					
<b>Sum</b>								<b>330</b>	<b>0</b>

**QFN (Saw Type, Pb-free)**

LT48BAAAAAN	A	100101	R1	CY8CTMA300EES5-48LTXI	121	0	288	80	0
LT48BAAAAAN	MB	100101	R2	CY8CTMA300EES5-48LTXI	121	0	168	80	0
LT48BAAAAAN	MB	100101	R2	CY8CTMA300EES5-48LTXI	121	0	288	79	0
LT68CAAAAAL	CA	101401	R1	CY8C3866LTI-030ES2	121	0	168	83	0
LT68CAAAAAL	CA	101401	R1	CY8C3866LTI-030ES2	121	0	288	68	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	121	0	168	77	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	121	0	288	63	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	121	0	168	77	0

LT48DBAAL	RA	102610	R2	CY8C28645-24LTXI	121	0	288	77	0
LT56BCAAGL	AE	103407	R1	CY7C65640A-LTXC	121	0	168	80	0
LT56BCAAGL	AE	103407	R1	CY7C65640A-LTXC	121	0	288	79	0
LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	121	0	168	30	0
LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	121	0	288	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	121	0	168	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	121	0	288	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	121	0	168	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	121	0	288	30	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	121	0	168	30	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	121	0	288	29	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	121	0	168	30	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	121	0	288	30	0
LT32BABCGL	RA	MR104012	R1A	CY8C21434-24LTXI	121	0	168	29	0
LT32BABCGL	RA	MR104012	R1A	CY8C21434-24LTXI	121	0	288	29	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	121	0	168	30	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	121	0	288	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	121	0	168	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	121	0	288	30	0
LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	121	0	168	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	121	0	168	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	121	0	288	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	121	0	168	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	121	0	288	30	0

Summary for Package Family: QFN (Saw Type, Pb-free)

32 records

Sum 1470 0

QSOP (Pb-Free)

SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	121	0	168	29	0
SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	121	0	288	29	0
SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	121	0	168	30	0



SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	121	0	288	30	0
<b>Summary for Package Family: QSOP (Pb-Free)</b>			<b>4</b>	<b>records</b>					
<b>Sum</b>								<b>118</b>	<b>0</b>
<b>SNC (Pb-Free)</b>									
SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	121	0	168	80	0
SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	121	0	288	80	0
SY2831BHN	JT	105208	R1	CY62256NLL-70SNXA	121	0	96	77	0
SY2831BHN	JT	105208	R1	CY62256NLL-70SNXA	121	0	168	77	0
SY2831BHN	JT	105208	R2	CY62256VNLL-70SNXE	121	0	96	77	0
SY2831BHN	JT	105208	R2	CY62256VNLL-70SNXE	121	0	168	77	0
SY2831BHN	JT	105208	R3	7A622574NDC	121	0	96	80	0
SY2831BHN	JT	105208	R3	7A622574NDC	121	0	168	80	0
SY2831BHN	JT	111401	R1	7A622574NDC	121	0	96	100	0
SY2831BHN	JT	111401	R1	7A622574NDC	121	0	168	90	0
SY2831BHN	JT	111401	R2	CY62256NLL-70SNXA	121	0	96	100	0
SY2831BHN	JT	111401	R2	CY62256NLL-70SNXA	121	0	168	90	0
SY2831BHN	JT	111401	R3	CY6264-70SNXA	121	0	96	99	0
SY2831BHN	JT	111401	R3	CY6264-70SNXA	121	0	168	89	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	121	0	168	29	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	121	0	288	28	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	121	0	168	30	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	121	0	288	30	0
<b>Summary for Package Family: SNC (Pb-Free)</b>			<b>18</b>	<b>records</b>					
<b>Sum</b>								<b>1313</b>	<b>0</b>
<b>SOIC (J-Lead)</b>									
V3645BGBLN	JT	110907	R1	7C1549SCC	121	0	168	79	0
V3645BGBLN	JT	110907	R1	7C1549SCC	121	0	288	79	0
<b>Summary for Package Family: SOIC (J-Lead)</b>			<b>2</b>	<b>records</b>					
<b>Sum</b>								<b>158</b>	<b>0</b>
<b>SOIC (J-Lead, Pb-Free)</b>									
VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	121	0	168	76	0

VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	121	0	288	76	0
VZ32421CLL	JT	104805	R2	CY7C1019CV33-15VXC	121	0	168	77	0
VZ32421CLL	JT	104805	R2	CY7C1019CV33-15VXC	121	0	288	76	0
VZ28313CLN	JT	104811	R2	CY7C1399BN-12VXC	121	0	168	77	0
VZ28313CLN	JT	104811	R2	CY7C1399BN-12VXC	121	0	288	77	0
VZ28311LLL	JT	105206	R1	CY7C199CN	121	0	96	77	0
VZ28311LLL	JT	105206	R1	CY7C199CN	121	0	168	77	0
VZ28311LLL	JT	105206	R2	CY7C199CN	121	0	96	77	0
VZ28311LLL	JT	105206	R2	CY7C199CN	121	0	168	77	0
VZ28311LLL	JT	105206	R3	CY7C199CN	121	0	96	77	0
VZ28311LLL	JT	105206	R3	CY7C199CN	121	0	168	77	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	121	0	168	30	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	121	0	288	30	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	121	0	168	30	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	121	0	288	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	121	0	168	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	121	0	288	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	121	0	168	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	121	0	288	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	121	0	168	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	121	0	288	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	121	0	168	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	121	0	288	29	0

Summary for Package Family: SOIC (J-Lead, Pb-Free)

24 records

Sum 1280 0

SOIC (Pb-Free)

SZ815WAGN	M	103507	R1	CY14C101J2-SXI	121	0	168	77	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	121	0	168	80	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	121	0	288	80	0
SZ32457LN	R	110708	R1	7A62128KC	121	0	96	77	0

SZ32457LN	R	110708	R1	7A62128KC	121	0	168	77	0
SZ32457LN	R	110708	R2	7A62128KC	121	0	96	77	0
SZ32457LN	R	110708	R2	7A62128KC	121	0	168	77	0
SZ32457LN	R	110708	R3	7A62128KC	121	0	96	76	0
SZ32457LN	R	110708	R3	7A62128KC	121	0	168	76	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	121	0	168	80	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	121	0	288	80	0
SZ324513AN	JT	111411	R1	7A62128ZHC	121	0	96	80	0
SZ324513AN	JT	111411	R1	7A62128ZHC	121	0	168	80	0
SZ32457ALN	JT	111411	R2	7A62128KC	121	0	96	80	0
SZ32457ALN	JT	111411	R2	7A62128KC	121	0	168	80	0
SZ32457ALN	JT	111411	R3	7A62128KC	121	0	96	80	0
SZ32457ALN	JT	111411	R3	7A62128KC	121	0	168	80	0
SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	121	0	96	100	0
SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	121	0	168	90	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	121	0	96	100	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	121	0	168	90	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	121	0	96	100	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	121	0	168	90	0
SZ815PAFGN	RA	MR102016	R1	CY2305SXI-1HT	121	0	288	30	0
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	121	0	96	30	0
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	121	0	168	30	0
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	121	0	288	30	0
SZ1615DGN	M	MR102049	R1	CG7192AM	121	0	288	30	0
SZ1615FAL	T	MR102055	R1	CY7C63803-SXC	121	0	288	30	0
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	121	0	168	30	0
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	121	0	288	30	0
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	121	0	96	30	0
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	121	0	168	30	0
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	121	0	288	30	0
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	121	0	168	30	0

SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	121	0	288	30	0
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	121	0	168	30	0
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	121	0	288	30	0
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	121	0	168	30	0
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	121	0	288	30	0
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	121	0	168	30	0
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	121	0	288	30	0
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	121	0	168	30	0
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	121	0	288	30	0
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	121	0	168	30	0
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	121	0	288	30	0
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	121	0	168	30	0
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	121	0	288	30	0
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	121	0	168	30	0
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	121	0	288	30	0
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	121	0	168	30	0
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	121	0	288	30	0
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	121	0	168	30	0
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	121	0	288	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	121	0	168	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	121	0	288	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	121	0	168	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	121	0	288	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	121	0	168	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	121	0	288	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	121	0	96	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	121	0	168	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	121	0	288	30	0
SZ1615KDG N	RA	MR112010	R1	CY2292FXC	121	0	168	30	0
SZ1615KDG N	RA	MR112010	R1	CY2292FXC	121	0	288	30	0

Summary for Package Family: SOIC (Pb-Free)

65

records

<b>Sum</b>									<b>3167</b>	<b>0</b>
<b>SSOP (Pb-Free)</b>										
SP483MBBGN	RA	101208	R1	CY8C3866PVI-021ES2	121	0	168	73	0	
SP483ACGAN	R	102306	R1	CY8C20546-24PVXI	121	0	288	85	0	
SP483ACGAN	R	102306	R2	CY8C20546-24PVXI	121	0	288	85	0	
SP483ACGAN	R	102306	R3	CY8C20546-24PVXI	121	0	288	85	0	
SP282ABAGN	RA	103205	R1	CY8C24494-24PVXI	121	0	168	80	0	
SP282ABAGN	RA	103205	R1	CY8C24494-24PVXI	121	0	288	80	0	
SP282ABBGN	RA	103205	R2	CY8C21534-24PVXI	121	0	168	80	0	
SP563DBC GN	JT	104802	R1	CY7C68001-56PVXC	121	0	168	80	0	
SP563DBC GN	JT	104802	R1	CY7C68001-56PVXC	121	0	288	80	0	
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	121	0	168	76	0	
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	121	0	288	76	0	
SP483MBBGN	RA	111301	R1	CY8C3866PVI-021ES3	121	0	168	80	0	
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	121	0	96	29	0	
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	121	0	168	29	0	
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	121	0	288	29	0	
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	121	0	168	30	0	
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	121	0	288	30	0	
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	121	0	168	30	0	
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	121	0	288	30	0	
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	121	0	168	30	0	
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	121	0	288	30	0	
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	121	0	168	30	0	
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	121	0	288	30	0	
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	121	0	168	30	0	
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	121	0	288	30	0	

**Summary for Package Family: SSOP (Pb-Free)**

**25 records**

<b>Sum</b>									<b>1347</b>	<b>0</b>
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**TQFP (Pb-Free)**

AZ100SFDAL	R	101101	R4	CY8C3866AXI-040ES3	121	0	168	80	0
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AZ100SFDAL	R	101101	R4	CY8C3866AXI-040ES3	121	0	168	80	0
AZ100SFDAL	R	101101	R5	CY8C3866AXI-040ES3	121	0	168	80	0
AZ100SFDAL	R	101101	R5	CY8C3866AXI-040ES3	121	0	168	80	0
AZ100AGAL	G	MR102065	R1	CY7C008V-25AXC	121	0	288	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	121	0	168	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	121	0	288	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	121	0	168	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	121	0	288	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	121	0	168	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	121	0	288	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	121	0	168	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	121	0	288	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	121	0	168	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	121	0	288	30	0
AZ160SBGAL	G	MR112037	R1	CY37256P160-83AXC	121	0	168	30	0
AZ160SBGAL	G	MR112037	R1	CY37256P160-83AXC	121	0	288	30	0

**Summary for Package Family: TQFP (Pb-Free)**

**17 records**

**Sum 710 0**

**TSOP (Pb-free)**

ZT28R5BBGL	JT	104815	R1	7C1995SMC	121	0	168	77	0
ZT28R5BBGL	JT	104815	R1	7C1995SMC	121	0	288	77	0
ZT28R2BCLN	JT	104815	R3	CY62256NLL-55ZXI	121	0	168	80	0
ZT28R2BCLN	JT	104815	R3	CY62256NLL-55ZXI	121	0	288	80	0
ZT28R2ABGN	JT	105202	R1	CY62256VLL	121	0	96	80	0
ZT28R2ABGN	JT	105202	R1	CY62256VLL	121	0	168	80	0
ZT28R2ABGN	JT	105202	R2	CY62256NLL-55ZXAT	121	0	96	80	0
ZT28R2ABGN	JT	105202	R2	CY62256NLL-55ZXAT	121	0	168	80	0
ZT28R2ABGN	JT	105202	R3	CY62256NLL-55ZXAT	121	0	96	80	0
ZT28R2ABGN	JT	105202	R3	CY62256NLL-55ZXAT	121	0	168	80	0
ZT32RABALL	T	MR102037	R1	CY62138FV30LL-45ZXI	121	0	288	30	0
ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	121	0	168	30	0



ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	121	0	288	28	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	121	0	168	30	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	121	0	288	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	121	0	168	29	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	121	0	288	29	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	121	0	168	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	121	0	288	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	121	0	168	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	121	0	288	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	121	0	168	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	121	0	288	29	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	121	0	168	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	121	0	288	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	121	0	168	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	121	0	288	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	121	0	168	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	121	0	288	30	0

Summary for Package Family: TSOP (Pb-free)

29 records

Sum 1359 0

TSOP I (Pb-Free)

ZB32RHBLN	JT	105211	R1	CY62148ESL	121	0	96	80	0
ZB32RHBLN	JT	105211	R1	CY62148ESL	121	0	168	80	0
ZB32RHABL	JT	105211	R2	CY62138FV30LL	121	0	96	80	0
ZB32RHABL	JT	105211	R2	CY62138FV30LL	121	0	168	80	0
ZB32RHABL	JT	105211	R3	CY62128ELL	121	0	96	80	0
ZB32RHABL	JT	105211	R3	CY62128ELL	121	0	168	80	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	121	0	168	30	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	121	0	288	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	121	0	168	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	121	0	288	30	0
ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	121	0	168	30	0



ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	121	0	288	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	121	0	168	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	121	0	288	30	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	121	0	168	30	0

**Summary for Package Family: TSOP I (Pb-Free)**

**15 records**

**Sum 750 0**

**TSOP II (Pb-Free)**

ZW444YBCLL	JT	104814	R1	CY7C1041BN-15ZXI	121	0	168	77	0
ZW444YBCLL	JT	104814	R1	CY7C1041BN-15ZXI	121	0	288	74	0
ZW444WBDLN	JT	104814	R3	CY14B256LA-ZS45XI	121	0	168	77	0
ZW444WBDLN	JT	104814	R3	CY14B256LA-ZS45XI	121	0	288	76	0
ZW444AKCLN	R	104907	R1	CY7C1041CV33	121	0	96	100	0
ZW444AKCLN	R	104907	R1	CY7C1041CV33	121	0	168	90	0
ZW444AKCLN	R	104907	R2	CY7C1041CV33	121	0	96	100	0
ZW444AKCLN	R	104907	R2	CY7C1041CV33	121	0	168	90	0
ZW444AKCLN	R	104907	R3	CY7C1041CV33	121	0	96	100	0
ZW444AKCLN	R	104907	R3	CY7C1041CV33	121	0	168	85	0
ZW444PAALL	RA	110703	R1	CY14B101KA	121	0	168	80	0
ZW444PAALL	RA	110703	R1	CY14B101KA	121	0	288	80	0
ZW444AAAGL	RA	110703	R2	CY7C1021DV33-10ZSXI	121	0	168	80	0
ZW444AAAGL	RA	110703	R2	CY7C1021DV33-10ZSXI	121	0	288	1	0
ZW444AAAGL	RA	110703	R2	CY7C1021DV33-10ZSXI	121	0	288	79	0
ZW444AKDLN	JT	111410	R1	7A134101FC	121	0	96	80	0
ZW444AKDLN	JT	111410	R1	7A134101FC	121	0	168	80	0
ZW444AHILL	JT	111410	R2	7A62126FC	121	0	96	80	0
ZW444AHILL	JT	111410	R2	7A62126FC	121	0	168	80	0
ZW444AHILL	JT	111410	R3	7A62126FC	121	0	96	80	0
ZW444AHILL	JT	111410	R3	7A62126FC	121	0	168	80	0
ZW544AALL	G	MR102050	R1	CY7C1069AV33-10ZXC	121	0	288	30	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	121	0	168	28	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	121	0	288	28	0

ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	121	0	168	30	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	121	0	288	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	121	0	168	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	121	0	288	30	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	121	0	168	30	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	121	0	288	28	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	121	0	168	30	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	121	0	288	30	0

Summary for Package Family: TSOP II (Pb-Free)

32 records

Sum 1993 0

TSSOP (Pb-Free)

ZZ2014BGN	T	MR102058	R1	CY25404ZXI-005T	121	0	288	30	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	121	0	168	30	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	121	0	288	30	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	121	0	168	30	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	121	0	288	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	121	0	168	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	121	0	288	29	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	121	0	168	30	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	121	0	288	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	121	0	168	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	121	0	288	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	121	0	168	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	121	0	288	30	0
ZZ2014BGN	T	MR112047	R1	CY25404ZXI-003T	121	0	168	30	0

Summary for Package Family: TSSOP (Pb-Free)

14 records

Sum 419 0

VFBGA (0.75-0.8, 0.3mm)

BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	121	0	168	30	0
BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	121	0	288	29	0

Summary for Package Family: VFBGA (0.75-0.8, 0.3mm)

2 records

**Sum** **59** **0**

**VFBGA (0.75-0.8, 0.3mm, Pb-Free)**

BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	121	0	168	80	0
BZ48ZBAALL	RA	091206	R2	CY621675EV18LL-55BVXI	121	0	168	80	0
BZ48ZBAALL	RA	091206	R3	CY621675EV30LL-45BVXI	121	0	168	79	0
BZ48ZBAALL	RA	091206	R3	CY621675EV30LL-45BVXI	121	0	288	38	0
BZ48CNAALL	G	103206	R1	CY7C62162DK	121	0	168	75	0
BZ48CNAALL	G	103206	R1	CY7C62162DK	121	0	288	69	0
BZ48CNAALL	G	103206	R2	CY62162DK	121	0	168	77	0
BZ48CNAALL	G	103206	R2	CY62162DK	121	0	288	54	0
BZ48CJALL	RA	104406	R3	CY62167DV30LL-55BVXI	121	0	168	77	0
BZ48RMAALL	RA	105004	R1	CY7C1061DV33-10BVXI	121	0	168	79	0
BZ48RMAALL	RA	105004	R1	CY7C1061DV33-10BVXI	121	0	288	79	0
BZ48RMAALL	RA	105004	R2	CY7C1061DV33-10BVXI	121	0	168	80	0
BZ48RMAALL	RA	105004	R2	CY7C1061DV33-10BVXI	121	0	288	79	0
BZ48RMAALL	RA	110301	R2	CY7C1061DV33-10BVXI	121	0	168	80	0
BZ48RMAALL	RA	110301	R3	CY7C1061DV33-10BVXI	121	0	168	79	0
BZ48RMAALL	RA	110301	R3	CY7C1061DV33-10BVXI	121	0	288	79	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	121	0	168	30	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	121	0	288	30	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	121	0	168	29	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	121	0	288	29	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	121	0	96	30	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	121	0	168	30	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	121	0	288	30	0
BZ48ZEAAL	RA	MR103046	R1	CG6833AM	121	0	168	30	0
BZ48ZEAAL	RA	MR103046	R1	CG6833AM	121	0	288	30	0
BZ48ZEAAL	RA	MR104005	R1	CG6833AMT	121	0	168	30	0
BZ48ZEAAL	RA	MR104005	R1	CG6833AMT	121	0	288	27	0
BZ100BABLL	RA	MR104011	R1A	CYDM128B16-55BVXI	121	0	168	30	0



BZ100BABLL	RA	MR104011	R1A	CYDM128B16-55BVXI	121	0	288	30	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	121	0	168	26	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	121	0	288	26	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	121	0	168	28	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	121	0	288	27	0
BZ48ABBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	121	0	168	30	0
BZ48ABBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	121	0	288	30	0
<b>Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)</b>			<b>35</b>	<b>records</b>					
<b>Sum</b>								<b>1736</b>	<b>0</b>

## Summary Detail -- TCT Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS	
<b>FBGA (0.75-0.8, 0.3mm, Pb-free)</b>												
BK48NAAAGL	T	100203	R1	CY14V101LA-BA*	150/-65	0	1000	78	0			
BK48PAALL	RA	102305	R1	CY14V104LA-BA45XIES	150/-65	0	500	77	0			
BK48PAALL	RA	102305	R1	CY14V104LA-BA45XIES	150/-65	0	1000	77	0			
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	150/-65	0	500	77	0			
BK48PAALL	RA	104107	R1	CY14V104LA-BA45XIES	150/-65	0	1000	77	0			
BK48PAALL	RA	104107	R2	CY14V104LA-BA45XIES	150/-65	0	500	77	0			
BK48PAALL	RA	104107	R2	CY14V104LA-BA45XIES	150/-65	0	1000	77	0			
BK48PAALL	RA	104107	R3	CY14V101LA-BA45XI	150/-65	0	500	77	0			
BK48PAALL	RA	104107	R3	CY14V101LA-BA45XI	150/-65	0	1000	77	0			
BK48HAGLL	G	MR102064	R1	CY14B104L-BA458XC	150/-65	0	500	30	0			
BK48HAGLL	G	MR102064	R1	CY14B104L-BA458XC	150/-65	0	1000	30	0			
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	150/-65	0	500	30	0			
BK48DJALL	G	MR103064	R1	CY62177DV30LL-55BAXI	150/-65	0	1000	30	0			
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	150/-65	0	500	30	0			
BK48DJALL	G	MR104065	R1	CY62177DV30LL-55BAXI	150/-65	0	1000	30	0			
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	150/-65	0	500	30	0			
BK48ACAALL	AT	MR104083	R1	CY7C67200-48BAXI	150/-65	0	1000	30	0			
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	150/-65	0	500	30	0			
BK48CPBGL	G	MR111028	R1	CY7C67200-48BAXIT	150/-65	0	1000	30	0			
<b>Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)</b>			<b>19</b>	<b>records</b>								
<b>Sum</b>								<b>994</b>	<b>0</b>			
<b>FBGA (1.0-1.27)</b>												
BB165RJALE	RA	095106	R1	CY7C1412KO	150/-65	0	1000	80	0			

BB165RNALE	RA	100901	R1C	CY7C1313KO	150/-65	0	500	76	0
BB165RNALE	RA	100901	R1C	CY7C1313KO	150/-65	0	1000	76	0
BB165RFALE	RA	103308	R6	CY7C1614KV	125/-55	0	500	74	0
BB165RFALE	RA	103308	R6	CY7C1614KV	125/-55	0	1000	74	0
BB165RFALE	RA	103308	R7	CY7C1618	125/-55	0	500	76	0
BB165RFALE	RA	103308	R7	CY7C1618	125/-55	0	1000	75	0
BB165RFALE	RA	103308	R8	CY7C1613	125/-55	0	500	77	0
BB165RFALE	RA	103308	R8	CY7C1613	125/-55	0	1000	77	0
BB165AVLE	RA	103602	R1	CY7C1305TV25-167BZC	150/-65	0	500	77	0
BB165AVLE	RA	103602	R2	CY7C1305TV25-167BZC	150/-65	0	500	77	0
BB165AVLE	RA	103602	R3	CY7C1305TV25-167BZC	150/-65	0	500	77	0
BB165DELLE	GQ	110402	R1	CY7C14141KV18	150/-65	0	500	80	0
BB165DELLE	GQ	110402	R1	CY7C14141KV18	125/-55	0	500	80	0
BB165DELLE	GQ	110402	R1	CY7C14141KV18	150/-65	0	1000	80	0
BB165DELLE	GQ	110402	R1	CY7C14141KV18	125/-55	0	1000	80	0
BB165DELLE	GQ	110402	R1	CY7C14141KV18	125/-55	0	2000	80	0
BB165GAALE	RA	MR102046	R1	CY7C1514KV18-250BZI	150/-65	0	500	30	0
BB165GAALE	RA	MR102046	R1	CY7C1514KV18-250BZI	150/-65	0	1000	27	0
BB165BUALE	G	MR102047	R1	CY7C1514KV18-300BZI	150/-65	0	500	30	0
BB165BUALE	G	MR102047	R1	CY7C1514KV18-300BZI	150/-65	0	1000	29	0
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	150/-65	0	500	29	0
BB165AVLE	RA	MR103021	R1	CY7C1305TV25-167BZC	150/-65	0	1000	29	0
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	150/-65	0	500	30	0
BB165GAALE	RA	MR103057	R1	CY7C1543KV18-400BZI	150/-65	0	1000	30	0
BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	150/-65	0	500	29	0
BB165GABLE	RA	MR104008	R1	CY7C1512KV18-250BZI	150/-65	0	1000	29	0
BB165GABLE	RA	MR104057	R1	CY7C1518KV18-333BZC	150/-65	0	500	30	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	150/-65	0	500	30	0
BB165UALE	G	MR104058	R1	CY7C1512AV18-200BZC	150/-65	0	1000	26	0
BB165AALE	G	RR101027	R1	CY7C1412AV18-250BZC	150/-65	0	1000	77	0

Summary for Package Family: FBGA (1.0-1.27)

31

records

**Sum** **1771** **0**

**FBGA (1.0-1.27, Pb-free)**

BW165RFALL	RA	103308	R4	7C1612KO	150/-65	0	220	74	0
BW165RFALL	RA	103308	R4	7C1612KO	150/-65	0	500	73	0
BW165RFALL	RA	103904	R1	7C1614KO	125/-55	0	500	6	0
BW165RFALL	RA	103904	R2	7C1614KO	150/-65	0	500	66	0
BW165RFALL	RA	103904	R2	7C1614KO	125/-55	0	500	77	0
BW165RFALL	RA	103904	R3	7C1614KO	150/-65	0	500	65	0
BW165RFALL	RA	103904	R3	7C1614KO	125/-55	0	500	77	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	125/-55	0	500	77	0
BW165DBALE	GQ	104601	R1	CY7C1514KV18-300BZC	125/-55	0	1000	77	0
BW165DBALE	GQ	104601	R2	CY7C1514KV18-300BZC	125/-55	0	500	77	0
BW165DBALE	GQ	104601	R2	CY7C1514KV18-300BZC	125/-55	0	1000	77	0
BW165DBALE	GQ	104601	R3	CY7C1514KV18-300BZC	125/-55	0	500	77	0
BW165DBALE	GQ	104601	R3	CY7C1514KV18-300BZC	125/-55	0	1000	77	0
BW165RTALL	RA	105103	R1	7C1614KO	125/-55	0	500	80	0
BW165RTALL	RA	105103	R1	7C1614KO	125/-55	0	1000	80	0
BW165RTALL	RA	105103	R1	7C1614KO	125/-55	0	1500	80	0
BW165RTALL	RA	105103	R1	7C1614KO	150/-65	0	500	76	0
BW165RTALL	RA	105103	R1	7C1614KO	150/-65	0	812	75	0
BW165RTALL	RA	105103	R1	7C1614KO	150/-65	0	1000	76	0
BW165RTALL	RA	105103	R2	7C1614KO	125/-55	0	500	80	0
BW165RTALL	RA	105103	R2	7C1614KO	125/-55	0	1000	80	0
BW165RTALL	RA	105103	R2	7C1614KO	125/-55	0	1500	80	0
BW165RTALL	RA	105103	R2	7C1614KO	150/-65	0	500	75	0
BW165RTALL	RA	105103	R2	7C1614KO	150/-65	0	812	75	0
BW165RTALL	RA	105103	R2	7C1614KO	150/-65	0	1000	75	0
BW165RTALL	RA	105103	R2	7C1614KO	150/-65	0	1300	74	0
BW165RTALL	RA	105103	R3	7C1614KO	125/-55	0	500	79	0
BW165RTALL	RA	105103	R3	7C1614KO	125/-55	0	1000	79	0
BW165RTALL	RA	105103	R3	7C1614KO	125/-55	0	1500	79	0



BW165RTALL	RA	105103	R3	7C1614KO	150/-65	0	500	77	0
BW165RTALL	RA	105103	R3	7C1614KO	150/-65	0	812	75	0
BW165RTALL	RA	105103	R3	7C1614KO	150/-65	0	1000	76	0
BW165RTALL	RA	105103	R3	7C1614KO	150/-65	0	1300	76	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	150/-65	0	500	29	0
BW165ALLL	G	MR103075	R1	CY7C1312CV18-250BZXC	150/-65	0	1000	29	0
BW165ANLL	G	RR101027	R2	CY7C1515JV18-300BZXC	150/-65	0	1000	71	0

**Summary for Package Family: FBGA (1.0-1.27, Pb-free)**

**36 records**

**Sum 2576 0**

**FLIPCHIP CSP (Pb-Free)**

FN30BGAAAL	AU	100806	R2	CY8C20746	125/-55	0	1000	87	0
FN81B	C	103604	R1	CYWB0226ABSX-FDXIT	125/-55	0	500	86	0
FN81B	C	103604	R1	CYWB0226ABSX-FDXIT	125/-55	0	1000	86	0
FN81B	C	103604	R2	7C07101	125/-55	0	500	80	0
FN81B	C	103604	R2	7C07101	125/-55	0	1000	77	0
FN81B	C	103604	R3	7C07101	125/-55	0	500	79	0
FN81B	C	103604	R3	7C07101	125/-55	0	1000	77	0

**Summary for Package Family: FLIPCHIP CSP (Pb-Free)**

**7 records**

**Sum 572 0**

**PBGA (1.27)**

BG119ADALE	AT	MR102056	R1	CY7C1361C-100BGC	150/-65	0	1000	30	0
BG119QALE	G	MR102066	R1	CY7C1347S-166BGC	150/-65	0	500	30	0
BG119QALE	G	MR102066	R1	CY7C1347S-166BGC	150/-65	0	1000	29	0

**Summary for Package Family: PBGA (1.27)**

**3 records**

**Sum 89 0**

**PBGA (Cavity/Heat Sink)**

BL256L2GE	G	MR104082	R1	7B9293C	150/-65	0	500	30	0
BL256L2GE	G	MR104082	R1	7B9293C	150/-65	0	1000	30	0

**Summary for Package Family: PBGA (Cavity/Heat Sink)**

**2 records**

**Sum 60 0**

**PBGA (Cavity/Heat Sink, Pb-free)**

BJ256L2GL	G	MR102054	R1	CYP15G0401DXB-BGX	150/-65	0	1000	30	0
BJ256L2GL	G	MR102054	R1	CYP15G0401DXB-BGX	150/-65	0	500	30	0

**Summary for Package Family: PBGA (Cavity/Heat Sink, Pb-free) 2 records**

**Sum 60 0**

**PDIP (Pb-Free)**

PZ183DBGN	RA	MR102061	R1	CY7C63813-PXC	150/-65	0	1000	30	0
PZ243AAAGN	X	MR102062	R1	CY7C63743C-PXC	150/-65	0	1000	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	150/-65	0	500	30	0
PZ183DPBGN	RA	MR103005	R1	CY7C63723C-PXC	150/-65	0	1000	29	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	150/-65	0	500	30	0
PZ283AAAGN	X	MR103029	R1	CY8C24423A-24PXI	150/-65	0	1000	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	150/-65	0	500	30	0
PZ183DPBGN	RA	MR104002	R1	CS6632AF	150/-65	0	1000	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	150/-65	0	500	30	0
PZ283AAAGN	X	MR104037	R1	CY8C27443-24PXI	150/-65	0	1000	30	0
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	150/-65	0	500	30	4
PZ283ACAGL	X	MR111052	R1	CY7C199CN-15PXC	150/-65	0	1000	22	0
PZ286EAAGN	X	MR112049	R1	CY62256NLL-70PXC	150/-65	0	500	30	0
PZ286EAAGN	X	MR112049	R1	CY62256NLL-70PXC	150/-65	0	1000	30	0

MR111052-1T1 Cut Wedge

**Summary for Package Family: PDIP (Pb-Free) 14 records**

**Sum 411 4**

**PLCC**

J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	150/-65	0	1000	30	0
J32RBGAAGB	X	MR103058	R1	CY7B991-2JCT	150/-65	0	500	30	0
J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	150/-65	0	1000	30	0
J32RBGAAGB	X	MR104038	R1	CY7B991V-2JCT	150/-65	0	500	30	0

**Summary for Package Family: PLCC 4 records**

**Sum 120 0**

**PLCC (Pb-Free)**

JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	150/-65	0	1000	30	0
JZ52SFGAN	M	MR103026	R1	CY7C136-25JXC	150/-65	0	500	30	0

**Summary for Package Family: PLCC (Pb-Free)**

**2 records**

**Sum 60 0**

**PQFP (Pb-free)**

NZ52DXGAN	G	103104	R1	CY7C136-55NXC	150/-65	0	500	80	0
NZ52DXGAN	G	103104	R1	CY7C136-55NXC	150/-65	0	1000	80	0
NZ52DXGAN	G	103104	R2	CY7C136-55NXC	150/-65	0	500	80	0
NZ52DXGAN	G	103104	R2	CY7C136-55NXC	150/-65	0	1000	80	0
NZ52DXGAN	G	103104	R3	CY7C136-55NXCT	150/-65	0	1000	80	0
NZ52DXGAN	G	103104	R3	CY7C136-55NXCT	150/-65	0	500	80	0
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	150/-65	0	500	36	0
NZ52DXGAN	G	MR103073	R1	CY7C136-55NXC	150/-65	0	1000	36	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	150/-65	0	1000	30	0
NZ52DXGAN	G	MR104060	R1	CY7C136-55NXCT	150/-65	0	500	30	0

**Summary for Package Family: PQFP (Pb-free)**

**10 records**

**Sum 612 0**

**QFN (0.6mm, Saw Type, Pb-Free)**

LQ36AAAAAL	L	101108	R1	CY8CTMA300EES-36LQXI	150/-65	0	1000	80	0
LQ36AAAAAL	L	101108	R2	CY8CTMA300EES-36LQXI	150/-65	0	1000	80	0
LQ36AAAAAL	L	101108	R3	CY8CTMA300EES-36LQXI	150/-65	0	1000	80	0
LQ32EPDAGL	RA	102603	R1	CY8C20466A-24LQXIES	150/-65	0	500	79	0
LQ32EPDAGL	RA	102603	R2	CY8C20466A-24LQXIES	150/-65	0	500	80	0
LQ32EPDAGL	RA	102607	R1	CY8C20466A-24LQXIES	150/-65	0	500	79	0
LQ32EPDAGL	RA	102607	R1	CY8C20466A-24LQXIES	150/-65	0	1000	79	0
LQ32EPDAGL	RA	102607	R3	CY8C20466A-24LQXIES	150/-65	0	500	79	0

LQ32EPDAGL	RA	102607	R3	CY8C20466A-24LQXIES	150/-65	0	1000	79	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	150/-65	0	500	80	0
LQ32EPDAGL	RA	102607	R5	CY8C20466A-24LQXIES	150/-65	0	1000	80	0
LQ32EPDAGL	RA	103605	R1	CY8C20466A-24LQXIES	150/-65	0	500	80	0
LQ32EPDAGL	RA	103605	R1	CY8C20466A-24LQXIES	150/-65	0	1000	80	0
LQ32EPDAGL	RA	103605	R2	CY8C20466A-24LQXIES	150/-65	0	500	80	0
LQ32EPDAGL	RA	103605	R2	CY8C20466A-24LQXIES	150/-65	0	1000	80	0
LQ32EPDAGL	RA	104403	R1	CY8C20466A-24LQXIES	150/-65	0	500	79	0
LQ32EPDAGL	RA	104403	R1	CY8C20466A-24LQXIES	150/-65	0	1000	79	0
LQ36ABAAAL	RA	101102-A	R2	CY8CTMA300EES-36LQXI	150/-65	0	1000	80	0
LQ32AFPDGL	RA	AR1009024	R1	CP7203BTT	150/-65	0	1000	9	0
LQ32AFPDGL	RA	AR1009030	R1	CY8C20424-12LQXI	150/-65	0	1000	6	0
LQ32AFPDGL	RA	AR1009030	R1	CY8C20424-12LQXI	150/-65	0	1000	3	0
LQ24AAAAAL	RA	MR102011	R1	CY8CTST200-24LQXIT	150/-65	0	1000	30	0
LQ24ABAAL	AT	MR102019	R1	CP7229ATT	150/-65	0	1000	28	0
LQ24ADAAGL	CA	MR102028	R1	CY8CTST200A-24LQXI	150/-65	0	1000	30	0
LQ36AAAAAN	M	MR102063	R1	CG7269AMT	150/-65	0	500	30	0
LQ36AAAAAN	M	MR102063	R1	CG7269AMT	150/-65	0	1000	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	150/-65	0	500	30	0
LQ32EPDAGL	RA	MR103013	R1	CY8C20446-24LQXI	150/-65	0	1000	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	150/-65	0	500	30	0
LQ24AAAAAL	RA	MR103027	R1	CP7229ATT	150/-65	0	1000	30	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	150/-65	0	500	29	0
LQ36ABAAAL	RA	MR103044	R1	CY8CTMA340-LQI-01T	150/-65	0	1000	29	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	150/-65	0	500	30	0
LQ36AAAAAN	M	MR103045	R1	CY8CTMA300E-36LQXIT	150/-65	0	1000	30	0
LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	150/-65	0	500	30	0
LQ24ACAAL	AT	MR103051	R1	CY7C68003-24LQXIT	150/-65	0	1000	28	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	150/-65	0	500	30	0
LQ32CCAAL	CA	MR103061	R1	CP7203BTT	150/-65	0	1000	30	0
LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	150/-65	0	500	30	0

LQ32EPDAGL	RA	MR104009	R1	CY8C20446-24LQXI	150/-65	0	1000	30	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	150/-65	0	500	30	0
LQ24AAAAAL	RA	MR104013	R1	CY8CTST200-24LQXIT	150/-65	0	1000	29	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	150/-65	0	500	30	0
LQ32CCAAL	CA	MR104033	R1	CP7203CTT	150/-65	0	1000	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	150/-65	0	500	30	0
LQ24ADAAGL	CA	MR104034	R1	CY8C20324-12LQXI	150/-65	0	1000	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	150/-65	0	500	30	0
LQ24ABAAL	AT	MR111001	R1	CP7262ATT	150/-65	0	1000	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	150/-65	0	500	30	0
LQ24ABAAL	AT	MR111002	R1	CP7262ATT	150/-65	0	1000	30	0
LQ36ABAAAL	RA	MR111009	R1	CY8CTMA340-LQI-01T	150/-65	0	500	30	0
LQ36ABAAAL	RA	MR111009	R1	CY8CTMA340-LQI-01T	150/-65	0	1000	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	150/-65	0	500	30	0
LQ36AAAAAN	MB	MR111045	R1	CY8CTMA3405-LQI-01	150/-65	0	1000	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	150/-65	0	500	30	0
LQ32EPDAGL	RA	MR112023	R1	CY8C20446A-24LQXIT	150/-65	0	1000	30	0

Summary for Package Family: QFN (0.6mm, Saw Type, Pb-Free)

56 records

Sum 2494 0

QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AAAAL	MB	104001	R1	CP7194AT	150/-65	0	500	79	0
LG16AAAAL	MB	104001	R1	CP7194AT	150/-65	0	1000	79	0
LG16AAAAL	MB	104001	R2	CP7194AT	150/-65	0	500	80	0
LG16AAAAL	MB	104001	R2	CP7194AT	150/-65	0	1000	80	0
LG16AAAAL	MB	104001	R3	CP7194AT	150/-65	0	500	70	0
LG16AAAAL	MB	104001	R3	CP7194AT	150/-65	0	1000	70	0
LG16ABAALL	L	104205	R1	CP7194AT	150/-65	0	500	80	0
LG16ABAALL	L	104205	R1	CP7194AT	150/-65	0	1000	80	0
LG16ABAALL	L	104205	R2	CP7194AT	150/-65	0	500	80	0
LG16ABAALL	L	104205	R2	CP7194AT	150/-65	0	1000	80	0

LG16ABAALL	L	104205	R3	CP7194AT	150/-65	0	500	80	0
LG16ABAALL	L	104205	R3	CP7194AT	150/-65	0	1000	80	0
LG16ABAALL	L	104910	R1	CY8C20236A-24LKXI	150/-65	0	500	80	0
LG16ABAALL	L	104910	R2	CY8C20236A-24LKXI	150/-65	0	500	79	0
LG16AAAAL	MB	110103	R1	CP7194AT	150/-65	0	500	100	0
LG16AAAAL	MB	110103	R1	CP7194AT	150/-65	0	1000	95	0
LG16AAAAL	MB	110103	R2	CP7194AT	150/-65	0	500	94	0
LG16AAAAL	MB	110103	R2	CP7194AT	150/-65	0	1000	88	0
LG16AAAAL	MB	110103	R3	CP7194AT	150/-65	0	500	100	0
LG16AAAAL	MB	110103	R3	CP7194AT	150/-65	0	1000	93	0
LG16AAAAL	MB	AR1043042	R1	CY8C20236A-24LKXIT	150/-65	0	500	19	0
LG16AAAAL	MB	AR1043042	R1	CY8C20236A-24LKXIT	150/-65	0	1000	18	0
LG16AAAAL	MB	AR1050032	R1	CY8C20236A-24LKXIT	150/-65	0	500	19	0
LG16AAAAL	MB	AR1050032	R1	CY8C20236A-24LKXIT	150/-65	0	1000	19	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	150/-65	0	500	26	0
LG16AAAAL	M	MR103042	R1	CY8C20234-12LKXIT	150/-65	0	1000	26	0
LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	150/-65	0	500	30	0
LG16AAAAL	MB	MR104048	R1	CY8C20236A-24LKXIT	150/-65	0	1000	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	150/-65	0	500	30	0
LG16AAAAL	MB	MR111011	R1	CY8C20236A-24LKXIT	150/-65	0	1000	30	0

Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)

30 records

Sum 1914 0

QFN (Punch Type, Pb-Free)

LY40CGAGR	L	MR102044	R1	CYRF69213-40LFXC	150/-65	0	1000	30	0
LY68AGABGL	L	MR102048	R1	CS6656AAT	150/-65	0	500	30	0
LY68AGABGL	L	MR102048	R1	CS6656AAT	150/-65	0	1000	30	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	150/-65	0	500	30	0
LY48EGAGL	L	MR103037	R1	CYWUSB6953-48LFXC	150/-65	0	1000	30	0
LY68AGAAGL	L	MR103043	R1	CS6656AAT	150/-65	0	500	30	0



LY68AGAAGL	L	MR103043	R1	CS6656AAT	150/-65	0	1000	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	150/-65	0	500	30	0
LY68AGABGL	L	MR104036	R1	CS6656AAT	150/-65	0	1000	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	150/-65	0	500	30	0
LY48EGAGL	L	MR104047	R1	CYWUSB6953-48LFXC	150/-65	0	1000	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	150/-65	0	500	30	0
LY40CGAGR	L	MR111027	R1	CYRF69213-40LFXC	150/-65	0	1000	30	0

Summary for Package Family: QFN (Punch Type, Pb-Free)

13 records

Sum 390 0

QFN (Saw Type, Pb-free)

LT48ABAAGR	CA	091801	R2A	CY8C20066-24LTXIES	150/-65	0	1000	77	0
LT48BAAAAN	MB	100101	R1A	CY8CTMA300EES5-48LTXI	150/-65	0	500	80	0
LT48BAAAAN	MB	100101	R1B	CY8CTMA300EES5-48LTXI	150/-65	0	500	80	0
LT48BAAAAN	MB	100101	R2	CY8CTMA300EES5-48LTXI	150/-65	0	500	80	0
LT68CAAAAL	CA	101401	R1	CY8C3866LTI-030ES2	150/-65	0	500	85	0
LT68CAAAAL	CA	101401	R2	CY8C3866LTI-030ES2	150/-65	0	500	85	0
LT68CAAAAL	CA	101401	R3	CY8C3866LTI-030ES2	150/-65	0	500	85	0
LT48DBAAAL	RA	102610	R1	CY8C3866LTI-068ES2	150/-65	0	500	77	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	150/-65	0	500	77	0
LT48DBAAAL	RA	102610	R2	CY8C28645-24LTXI	150/-65	0	1000	77	0
LT48DBAAAL	RA	102610	R3	CY8C3866LTI-068ES2	150/-65	0	500	80	0
LT56BCAAGL	AE	103407	R1	CY7C65640A-LTXC	150/-65	0	500	80	0
LT56BCAAGL	AE	103407	R1	CY7C65640A-LTXC	150/-65	0	1000	80	0
LT40ACAAGL	AE	103407	R2	CYRF6936-40LTXC	150/-65	0	500	79	0
LT40ACAAGL	AE	103407	R2	CYRF6936-40LTXC	150/-65	0	1000	79	0
LT56BCAAGL	AE	103407	R3	CY7C65640A-LTXCT	150/-65	0	500	79	0
LT56BCAAGL	AE	103407	R3	CY7C65640A-LTXCT	150/-65	0	1000	79	0
LT32BABCGL	RA	AR1028017	R1	CG7297AMT	150/-65	0	500	20	0
LT32BABCGL	RA	AR1028017	R1	CG7297AMT	150/-65	0	1000	20	0
LT32BABCGL	RA	AR1030014	R1	CG7297AMT	150/-65	0	500	20	0



LT32BABCGL	RA	AR1030014	R1	CG7297AMT	150/-65	0	1000	20	0
LT32BABCGL	RA	AR1030017	R1	CG7297AMT	150/-65	0	500	18	0
LT32BABCGL	RA	AR1030017	R1	CG7297AMT	150/-65	0	1000	18	0
LT48ABAAGR	CA	MR102027	R1	CY8CTMG200A-48LTXI	150/-65	0	1000	30	0
LT32BAAAGL	CA	MR102039	R1	CY8C21434-24LTXIT	150/-65	0	1000	30	0
LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	150/-65	0	500	30	0
LT48CDAAL	M	MR103038	R1	CYWUSB6935-48LTXI	150/-65	0	1000	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	150/-65	0	500	30	0
LT32BABCGL	RA	MR103047	R1	CY8CTMG110-32LTXI	150/-65	0	1000	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	150/-65	0	500	30	0
LT56BDAAGL	AE	MR103052	R1	CY7C64215-56LTXC	150/-65	0	1000	30	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	150/-65	0	500	30	0
LT40ACAAGL	AE	MR103063	R1	CYRF6936A-40LTXC	150/-65	0	1000	30	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	150/-65	0	500	30	0
LT32BAAAGL	CA	MR103069	R1	CS7224AAT	150/-65	0	1000	30	0
LT32BABCGL	RA	MR104012	R1	CY8C21434-24LTXI	150/-65	0	500	30	0
LT32BABCGL	RA	MR104012	R1	CY8C21434-24LTXI	150/-65	0	1000	30	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	150/-65	0	500	30	0
LT40ACAAGL	AE	MR104030	R1	CS7258AA	150/-65	0	1000	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	150/-65	0	500	30	0
LT48ABBAAL	MB	MR104045	R1	CP7245BT	150/-65	0	1000	30	0
LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	150/-65	0	500	29	0
LT56BDAAGL	AE	MR104050	R1	CY7C64215-56LTXC	150/-65	0	1000	29	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	150/-65	0	500	30	0
LT32BAAAGL	CA	MR104067	R1	CY8C24423A-24LTXI	150/-65	0	1000	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	150/-65	0	500	30	0
LT48ACBAAL	MB	MR111033	R1	CY8C27643-24LTXIT	150/-65	0	1000	30	0
LT40ACAAGL	AE	RR102002	R2	CS7258AA	150/-65	0	925	79	0

Summary for Package Family: QFN (Saw Type, Pb-free)

48 records

Sum

2272 0





**QSOP (Pb-Free)**

SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	150/-65	0	500	30	0
SQ2414ABGN	R	MR103007	R1	CY7C63101C-QXC	150/-65	0	1000	30	0
SQ2414ABGN	R	MR111076	R1	CY7C63743C-QXC	150/-65	0	500	30	0

**Summary for Package Family: QSOP (Pb-Free)**

**3 records**

**Sum 90 0**

**SNC (Pb-Free)**

SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	150/-65	0	500	79	0
SY2831BCLN	JT	104811	R1	CY62256NLL-70SNXC	150/-65	0	1000	79	0
SY2831BHN	JT	105208	R1	CY62256NLL-70SNXA	150/-65	0	500	87	0
SY2831BHN	JT	105208	R1	CY62256NLL-70SNXA	150/-65	0	1000	82	0
SY2831BHN	JT	105208	R2	CY62256VNLL-70SNXE	150/-65	0	500	90	0
SY2831BHN	JT	105208	R2	CY62256VNLL-70SNXE	150/-65	0	1000	90	0
SY2831BHN	JT	105208	R3	7A622574NDC	150/-65	0	500	89	0
SY2831BHN	JT	105208	R3	7A622574NDC	150/-65	0	1000	89	0
SY2831BHN	JT	111401	R1	7A622574NDC	150/-65	0	500	99	0
SY2831BHN	JT	111401	R1	7A622574NDC	150/-65	0	1000	89	0
SY2831BHN	JT	111401	R2	CY62256NLL-70SNXA	150/-65	0	500	100	0
SY2831BHN	JT	111401	R2	CY62256NLL-70SNXA	150/-65	0	1000	90	0
SY2831BHN	JT	111401	R3	CY6264-70SNXA	150/-65	0	500	100	0
SY2831BHN	JT	111401	R3	CY6264-70SNXA	150/-65	0	1000	90	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	150/-65	0	500	30	0
SY2831BBLN	R	MR103010	R1	CY62256NLL-55SNXIT	150/-65	0	1000	30	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	150/-65	0	500	30	0
SY2831BBLN	R	MR104022	R1	CY62256NLL-70SNXC	150/-65	0	1000	30	0

**Summary for Package Family: SNC (Pb-Free)**

**18 records**

**Sum 1373 0**

**SOIC**

S0815KAGB	M	AR1112032	R1	IMIFS741BZBT	150/-65	0	500	20	0
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**Summary for Package Family: SOIC**

**1 records**

**Sum 20 0**



**SOIC (J-Lead)**

V3645BGBLN	JT	110907	R1	7C1549SCC	150/-65	0	500	80	0
V3645BGBLN	JT	110907	R1	7C1549SCC	150/-65	0	1000	80	0

**Summary for Package Family: SOIC (J-Lead)**

**2 records**

**Sum 160 0**

**SOIC (J-Lead, Pb-Free)**

VZ2846AAAN	OP	100807	R1	CY7C106BN-15VC	150/-65	0	1000	75	0
VZ2846AAAN	OP	100807	R3	CY7C107BN-15VC	150/-65	0	1000	78	0
VZ2846AAAN	OP	100807	R4	CY7C107BN-15VC	150/-65	0	1000	78	0
VZ2846AAAN	OP	100807	R5	CY7C107BN-15VC	150/-65	0	1000	78	0
VZ2846AAAN	OP	100807	R6	CY7C107BN-15VC	150/-65	0	1000	78	0
VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	150/-65	0	500	77	0
VZ32422CLL	JT	104805	R1	CY7C1046D-10VXI	150/-65	0	1000	77	0
VZ32421CLL	JT	104805	R2	CY7C1019CV33-15VXC	150/-65	0	500	80	0
VZ32421CLL	JT	104805	R2	CY7C1019CV33-15VXC	150/-65	0	1000	80	0
VZ32420DLL	JT	104805	R3	CY7C109D-10VXI	150/-65	0	500	80	0
VZ32420DLL	JT	104805	R3	CY7C109D-10VXI	150/-65	0	1000	80	0
VZ28313CLN	JT	104811	R2	CY7C1399BN-12VXC	150/-65	0	500	77	0
VZ28313CLN	JT	104811	R2	CY7C1399BN-12VXC	150/-65	0	1000	77	0
VZ28313CLN	JT	104811	R3	CY7C1399BN-12VXC	150/-65	0	500	77	0
VZ28313CLN	JT	104811	R3	CY7C1399BN-12VXC	150/-65	0	1000	77	0
VZ28311LLL	JT	105206	R1	CY7C199CN	150/-65	0	500	90	0
VZ28311LLL	JT	105206	R1	CY7C199CN	150/-65	0	1000	85	0
VZ28311LLL	JT	105206	R2	CY7C199CN	150/-65	0	500	89	0
VZ28311LLL	JT	105206	R2	CY7C199CN	150/-65	0	1000	89	0
VZ28311LLL	JT	105206	R3	CY7C199CN	150/-65	0	500	90	0
VZ28311LLL	JT	105206	R3	CY7C199CN	150/-65	0	1000	90	0
VZ444ADCLN	JT	110907	R2	CY7C1041DV33-10VXI	150/-65	0	500	80	0
VZ444ADCLN	JT	110907	R2	CY7C1041DV33-10VXI	150/-65	0	1000	79	0
VZ444ACCLN	JT	110907	R3	CY7C1021D-10VXI	150/-65	0	500	80	0
VZ444ACCLN	JT	110907	R3	CY7C1021D-10VXI	150/-65	0	1000	80	0



VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	150/-65	0	500	27	0
VZ3649BALN	R	MR103009	R1	CY7C1049DV33-10VXIT	150/-65	0	1000	27	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	150/-65	0	500	30	0
VZ2847AAAR	O	MR103054	R1	CY7C106D-10VXI	150/-65	0	1000	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	150/-65	0	500	30	0
VZ3649BALN	R	MR104021	R1	CG7119AM	150/-65	0	1000	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	150/-65	0	500	30	0
VZ32420BLL	R	MR104027	R1	CY7C109D-10VXI	150/-65	0	1000	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	150/-65	0	500	30	0
VZ2847AAAR	OP	MR104080	R1	CY7C107D-10VXI	150/-65	0	1000	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0
VZ32314BLL	R	MR111050	R1	CY7C1018DV33-10VXIT	150/-65	0	1000	30	0

Summary for Package Family: SOIC (J-Lead, Pb-Free)

37 records

Sum 2375 0

SOIC (Pb-Free)

SZ24315DGN	RA	102902	R1	CY7C63823-SXC	150/-65	0	500	79	0
SZ24315DGN	RA	102902	R1	CY7C63823-SXC	150/-65	0	1000	79	0
SZ24315DGN	RA	102902	R2	CY7C63823-SXC	150/-65	0	500	80	0
SZ24315DGN	RA	102902	R2	CY7C63823-SXC	150/-65	0	1000	80	0
SZ24315DGN	RA	102902	R3	CY7C63823-SXC	150/-65	0	500	80	0
SZ24315DGN	RA	102902	R3	CY7C63823-SXC	150/-65	0	1000	80	0
SZ815WAGN	M	103507	R1	CY14C101J2-SXI	150/-65	0	500	77	0
SZ815WAGN	M	103507	R1	CY14C101J2-SXI	150/-65	0	1000	77	0
SZ815WAGN	M	103507	R2	CY14B101Q2A-SXI	150/-65	0	500	80	0
SZ815WAGN	M	103507	R2	CY14B101Q2A-SXI	150/-65	0	1000	80	0
SZ815WAGN	M	103507	R3	CY14B101Q1A-SXI	150/-65	0	500	77	0
SZ815WAGN	M	103507	R3	CY14B101Q1A-SXI	150/-65	0	1000	77	0
SZ183CPBAN	RA	103603	R1	CY7C63813-SXC	150/-65	0	500	79	0
SZ183CPBAN	RA	103603	R1	CY7C63813-SXC	150/-65	0	1000	79	0
SZ183CPCAN	RA	103603	R2	CY7C63231A-SXC	150/-65	0	500	80	0

SZ183CPCAN	RA	103603	R2	CY7C63231A-SXC	150/-65	0	1000	80	0
SZ183CPBAN	RA	103603	R3	CY7C63813-SXC	150/-65	0	500	79	0
SZ183CPBAN	RA	103603	R3	CY7C63813-SXC	150/-65	0	1000	79	0
SZ183CPCAN	RA	103603	R4	CY7C63231A-SXC	150/-65	0	500	80	0
SZ183CPCAN	RA	103603	R5	CY7C63231A-SXC	150/-65	0	500	80	0
SZ183CPCAN	RA	103603	R6	CY7C63231A-SXC	150/-65	0	500	80	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	150/-65	0	500	80	0
SZ815YAALN	RA	103902	R1	CY14B101Q2A-SXI	150/-65	0	1000	80	0
SZ815YAALN	RA	103902	R2	CY14C101Q1A-SXI	150/-65	0	500	80	0
SZ815YAALN	RA	103902	R2	CY14C101Q1A-SXI	150/-65	0	1000	80	0
SZ815YAALN	RA	103902	R3	CY14E101J2-SXI	150/-65	0	500	82	0
SZ815YAALN	RA	103902	R3	CY14E101J2-SXI	150/-65	0	1000	82	0
SZ32457LN	R	110708	R1	7A62128KC	150/-65	0	500	77	0
SZ32457LN	R	110708	R1	7A62128KC	150/-65	0	1000	72	0
SZ32457LN	R	110708	R2	7A62128KC	150/-65	0	500	69	0
SZ32457LN	R	110708	R2	7A62128KC	150/-65	0	1000	64	0
SZ32457LN	R	110708	R3	7A62128KC	150/-65	0	500	77	0
SZ32457LN	R	110708	R3	7A62128KC	150/-65	0	1000	72	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	150/-65	0	500	80	0
SZ32451ALL	JT	110902	R1	CY62148BNLL-70SXI	150/-65	0	1000	79	0
SZ32451DLL	JT	110902	R2	CG6713AM	150/-65	0	500	80	0
SZ32451DLL	JT	110902	R2	CG6713AM	150/-65	0	1000	80	0
SZ32457CLN	JT	110902	R3	CG6707AM	150/-65	0	500	79	0
SZ32457CLN	JT	110902	R3	CG6707AM	150/-65	0	1000	79	0
SZ324513AN	JT	111411	R1	7A62128ZHC	150/-65	0	500	85	0
SZ324513AN	JT	111411	R1	7A62128ZHC	150/-65	0	1000	80	0
SZ32457ALN	JT	111411	R2	7A62128KC	150/-65	0	500	80	0
SZ32457ALN	JT	111411	R2	7A62128KC	150/-65	0	1000	80	0
SZ32457ALN	JT	111411	R3	7A62128KC	150/-65	0	500	80	0
SZ32457ALN	JT	111411	R3	7A62128KC	150/-65	0	1000	80	0
SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	150/-65	0	500	100	0



SZ324513AN	JT	111412	R1	CY62128BNLL-70SXA	150/-65	0	1000	90	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	150/-65	0	500	100	0
SZ32457ALN	JT	111412	R2	CY62128ELL-55ZAXE	150/-65	0	1000	90	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	150/-65	0	500	100	0
SZ32457ALN	JT	111412	R3	CY62128ELL-55ZAXE	150/-65	0	1000	90	0
SZ183CBGAN	RA	AR1019008	R1	CY7C63723C-SXC	150/-65	0	500	19	0
SZ183CBGAN	RA	AR1019008	R1	CY7C63723C-SXC	150/-65	0	1000	12	0
SZ183CPBAN	RA	AR1022008	R1	CY7C63723C-SXC	150/-65	0	500	13	0
SZ183CPBAN	RA	AR1022008	R1	CY7C63723C-SXC	150/-65	0	1000	8	0
SZ815CGAN	M	AR1023021	R1	CY8C24123A-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1023021	R1	CY8C24123A-24SXI	150/-65	0	1000	15	0
SZ815DAGN	M	AR1024021	R1	CY2303SXCT	150/-65	0	500	15	0
SZ815DAGN	M	AR1024021	R1	CY2303SXCT	150/-65	0	1000	15	0
SZ815CGAN	M	AR1026025	R1	CP7263ATT	150/-65	0	500	14	0
SZ815CGAN	M	AR1026025	R1	CP7263ATT	150/-65	0	1000	14	0
SZ815CGAN	M	AR1028024	R1	CY8C21123-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1028024	R1	CY8C21123-24SXI	150/-65	0	1000	15	0
SZ815CGAN	M	AR1028025	R1	CY8C21123-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1028025	R1	CY8C21123-24SXI	150/-65	0	1000	15	0
SZ815CGAN	M	AR1030024	R1	CY8C21123-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1030024	R1	CY8C21123-24SXI	150/-65	0	1000	15	0
SZ815CGAN	M	AR1032019	R1	CP7263ATT	150/-65	0	500	15	0
SZ815CGAN	M	AR1032019	R1	CP7263ATT	150/-65	0	1000	15	0
SZ815CGAN	M	AR1033022	R1	CY8C24123A-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1033022	R1	CY8C24123A-24SXI	150/-65	0	1000	15	0
SZ815CGAN	M	AR1034022	R1	CY8C21123-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1034022	R1	CY8C21123-24SXI	150/-65	0	1000	15	0
SZ815CGAN	M	AR1035019	R1	CP7202ATT	150/-65	0	500	15	0
SZ815CGAN	M	AR1035019	R1	CP7202ATT	150/-65	0	1000	15	0
SZ815CGAN	M	AR1036026	R1	CY8C21123-24SXI	150/-65	0	500	15	0
SZ815CGAN	M	AR1036026	R1	CY8C21123-24SXI	150/-65	0	1000	15	0



SZ815CGAAS	M	AR1038019	R1	CY2305CSXA-1HT	150/-65	0	500	15	0
SZ815CGAN	M	AR1043020	R1	CY8C21123-24SXI	150/-65	0	500	20	0
SZ815CGAN	M	AR1043020	R1	CY8C21123-24SXI	150/-65	0	1000	20	0
SZ1615DGN	M	AR1043021	R1	CY8C21234-24SXI	150/-65	0	500	20	0
SZ1615DGN	M	AR1043021	R1	CY8C21234-24SXI	150/-65	0	1000	20	0
SZ815KAGN	M	AR1050040	R1	CY25100SXI-050T	150/-65	0	500	20	0
SZ815KAGN	M	AR1050040	R1	CY25100SXI-050T	150/-65	0	1000	19	0
SZ815PADGN	RA	AR1105010	R1	CY2305CSXC-1T	150/-65	0	500	16	0
SZ815KAGN	M	AR1105019	R1	CYIFS731SXCT	150/-65	0	500	20	0
SZ815KAGN	M	AR1105019	R1	CYIFS731SXCT	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105021	R1	CP6789AMT	150/-65	0	500	20	0
SZ815CGAN	M	AR1105021	R1	CP6789AMT	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105022	R1	CP7202ATT	150/-65	0	500	20	0
SZ815CGAN	M	AR1105022	R1	CP7202ATT	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105023	R1	CY8C21123-24SXI	150/-65	0	500	20	0
SZ815CGAN	M	AR1105023	R1	CY8C21123-24SXI	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105024	R1	CY8C21123-24SXI	150/-65	0	500	20	0
SZ815CGAN	M	AR1105024	R1	CY8C21123-24SXI	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105025	R1	CY8C21123-24SXI	150/-65	0	500	20	0
SZ815CGAN	M	AR1105025	R1	CY8C21123-24SXI	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105027	R1	CP6789AMT	150/-65	0	500	20	0
SZ815CGAN	M	AR1105027	R1	CP6789AMT	150/-65	0	1000	20	0
SZ815CGAN	M	AR1105028	R1	CY8C21123-24SXI	150/-65	0	500	19	0
SZ815CGAN	M	AR1105028	R1	CY8C21123-24SXI	150/-65	0	1000	19	0
SZ815CGAN	M	AR1112025	R1	CY8C24123A-24SXIT	150/-65	0	500	20	0
SZ815CGAN	M	AR1112027	R1	CY8C24123A-24SXI	150/-65	0	500	20	0
SZ815KAGN	M	AR1112029	R1	CY25100SXI-050T	150/-65	0	500	20	0
SZ815KAGN	M	AR1112029	R1	CY25100SXI-050T	150/-65	0	1000	20	0
SZ815CGAAS	M	AR1112030	R1	CY2305CSXA-1HT	150/-65	0	500	20	0
SZ815CGAAS	M	AR1112030	R1	CY2305CSXA-1HT	150/-65	0	1000	20	0
SZ815PAFGN	RA	MR102016	R1	CY2305SXI-1HT	150/-65	0	500	29	0



SZ815PAFGN	RA	MR102016	R1	CY2305SXI-1HT	150/-65	0	1000	29	0		
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	150/-65	0	500	30	0		
SZ324513N	R	MR102021	R1	CY62128BNLL-70SXET	150/-65	0	1000	28	0		
SZ28327BGL	R	MR102024	R1	CY8C27443-24SXI	150/-65	0	1000	30	0		
SZ1615DGN	M	MR102049	R1	CG7192AM	150/-65	0	500	30	0		
SZ1615DGN	M	MR102049	R1	CG7192AM	150/-65	0	1000	30	0		
SZ1615FAL	T	MR102055	R1	CY7C63803-SXC	150/-65	0	1000	30	0		
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	150/-65	0	500	29	0		
SZ24315EGN	RA	MR103004	R1	CY7C63613C-SXC	150/-65	0	1000	29	0		
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	150/-65	0	500	30	0		
SZ32457LN	R	MR103008	R1	CY62128ELL-45SXA	150/-65	0	1000	29	0		
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	150/-65	0	500	30	0		
SZ28327BGL	R	MR103015	R1	CY8C27443-24SXI	150/-65	0	1000	30	0		
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	150/-65	0	500	30	0		
SZ815PAEGN	RA	MR103022	R1	CY2305SXC-1HT	150/-65	0	1000	30	0		
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	150/-65	0	500	28	0		
SZ1615FAL	T	MR103031	R1	CY2309CSXC-1T	150/-65	0	1000	28	0		
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	150/-65	0	500	30	0		
SZ28327BBL	R	MR103071	R1	CY8C24423A-24SXI	150/-65	0	1000	30	0		
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	150/-65	0	500	30	0		
SZ24315EGN	RA	MR104001	R1	CY7C63613C-SXCT	150/-65	0	1000	30	0		
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	150/-65	0	500	30	0		
SZ324513BN	R	MR104020	R1	CY62128BNLL-55SXIT	150/-65	0	1000	30	0		
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	150/-65	0	500	30	0		
SZ1615FAL	T	MR104069	R1	CY8C20160-SX2IT	150/-65	0	1000	30	0		
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	150/-65	0	500	30	0		
SZ28327BGL	R	MR111003	R1	CY8C27443-24SXIT	150/-65	0	1000	30	0		
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	150/-65	0	500	30	0		
SZ24315EGN	RA	MR111006	R1	CY7C63743C-SXCT	150/-65	0	1000	30	9	MR111006-1T2	Cut Wedge
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	150/-65	0	500	30	0		
SZ815PAEGN	RA	MR111030	R1	CY2305SXC-1HT	150/-65	0	1000	30	0		

SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	150/-65	0	500	30	0
SZ1615FAL	T	MR111046	R1	CY2309CSXC-1	150/-65	0	1000	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	150/-65	0	500	30	0
SZ815CGAN	M	MR111053	R1	CY8C24123A-24SXI	150/-65	0	1000	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	150/-65	0	500	30	0
SZ28327BGL	R	MR111055	R1	CY8C27443-24SXIT	150/-65	0	1000	30	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	150/-65	0	500	29	0
SZ324513N	R	MR111064	R1	CY62128BNLL-70SXET	150/-65	0	1000	28	0
SZ1615KDGN	RA	MR112010	R1	CY2292FXC	150/-65	0	500	30	0
SZ1615KDGN	RA	MR112010	R1	CY2292FXC	150/-65	0	1000	30	0
SZ323AEGAS	M	RR102039	R1	CY14E256LA-SZ45XI	150/-65	0	500	80	0
SZ323AEGAS	M	RR102039	R2	CY14B256LA-SZ25XIT	150/-65	0	500	80	0
SZ323AEGAS	M	RR102039	R3	CY14B256LA-SZ45XIT	150/-65	0	500	80	0
SZ815CGAN	M	RR103003	R10	CY8C24123A-24SXI	150/-65	0	100	198	0
SZ815KAGN	M	RR103003	R11	CYIFS782BSXCT	150/-65	0	100	200	0
SZ815CGAN	M	RR103003	R12	CP7263AT	150/-65	0	100	200	0
SZ815CGAN	M	RR103003	R7	CY8C24123A-24SXIT	150/-65	0	100	199	0
SZ815CGAN	M	RR103003	R8	CY8C24123A-24SXIT	150/-65	0	100	199	0
SZ815KAGN	M	RR103003	R9	CYIFS741BSXBT	150/-65	0	100	200	0

Summary for Package Family: SOIC (Pb-Free)

158 records

Sum 7759 9

SSOP (Pb-Free)

SP563GAAGL	R	101205	R1	CY8C28000-24PVXI	150/-65	0	1000	80	0
SP563GAAGL	R	101205	R2	CY8C28000-24PVXI	150/-65	0	1000	80	0
SP563GAAGL	R	101205	R3	CY8C28000-24PVXI	150/-65	0	1000	80	0
SP483MBBGN	RA	101208	R1	CY8C3866PVI-021ES2	150/-65	0	500	80	0
SP483MBBGN	RA	101208	R2	CY8C3866PVI-021ES2	150/-65	0	500	80	0
SP483MBBGN	RA	101208	R3	CY8C3866PVI-021ES2	150/-65	0	500	80	0
SP483ACGAN	R	102306	R1	CY8C20546-24PVXI	150/-65	0	500	90	0
SP483ACGAN	R	102306	R1	CY8C20546-24PVXI	150/-65	0	1000	85	0
SP483ACGAN	R	102306	R2	CY8C20546-24PVXI	150/-65	0	500	90	0





SP483ACGAN	R	102306	R2	CY8C20546-24PVXI	150/-65	0	1000	85	0
SP483ACGAN	R	102306	R3	CY8C20546-24PVXI	150/-65	0	500	90	0
SP483ACGAN	R	102306	R3	CY8C20546-24PVXI	150/-65	0	1000	85	0
SP282ABAGN	RA	103205	R1	CY8C24494-24PVXI	150/-65	0	500	79	0
SP282ABAGN	RA	103205	R1	CY8C24494-24PVXI	150/-65	0	1000	71	0
SP282ABBGN	RA	103205	R2	CY8C21534-24PVXI	150/-65	0	500	80	0
SP282ABAGN	RA	103207	R1	CY8C24494-24PVXI	150/-65	0	500	79	0
SP282ABAGN	RA	103207	R1	CY8C24494-24PVXI	150/-65	0	1000	79	0
SP282ABBGN	RA	103207	R2	CY8C21534-24PVXI	150/-65	0	500	79	0
SP563DBC GN	JT	104802	R1	CY7C68001-56PVXC	150/-65	0	500	80	0
SP563DBC GN	JT	104802	R1	CY7C68001-56PVXC	150/-65	0	1000	80	0
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	150/-65	0	500	80	0
SP483JBCLL	JT	104802	R2	CY14B101KA-SP45XI	150/-65	0	1000	80	0
SP563DBC GN	JT	104802	R3	CY7C68013A-56PVXC	150/-65	0	500	80	0
SP563DBC GN	JT	104802	R3	CY7C68013A-56PVXC	150/-65	0	1000	80	0
SP2822BGL	M	AR1016023	R1	CY8C21534-24PVXAT	150/-65	0	500	15	0
SP2822BGL	M	AR1016023	R1	CY8C21534-24PVXAT	150/-65	0	1000	15	0
SP282ABAGN	RA	AR1021013	R1	CY8C24423A-24PVXI	150/-65	0	500	19	0
SP282ABAGN	RA	AR1021013	R1	CY8C24423A-24PVXI	150/-65	0	1000	19	0
SP483EBBAL	R	AR1023003	R1	CY8C29666-24PVXI	150/-65	0	500	17	0
SP483EBBAL	R	AR1023003	R1	CY8C29666-24PVXI	150/-65	0	1000	17	0
SP483EBBAL	R	AR1030003	R1	CY8C29666-24PVXI	150/-65	0	500	20	0
SP483EBBAL	R	AR1030003	R1	CY8C29666-24PVXI	150/-65	0	1000	20	0
SP483EBBAL	R	AR1031003	R1	CY8C29666-24PVXI	150/-65	0	500	18	0
SP483EBBAL	R	AR1031003	R1	CY8C29666-24PVXI	150/-65	0	1000	17	0
SP282ABBGN	RA	AR1040013	R1	CY8C21534-24PVXI	150/-65	0	500	17	0
SP282ABBGN	RA	AR1040013	R1	CY8C21534-24PVXI	150/-65	0	1000	17	0
SP483EBBAL	R	AR1045003	R1	CY8C29666-24PVXI	150/-65	0	500	20	0
SP483EBBAL	R	AR1045003	R1	CY8C29666-24PVXI	150/-65	0	1000	19	0
SP483EBBAL	R	AR1051003	R1	CY8C29666-24PVXIT	150/-65	0	500	20	0
SP483EBBAL	R	AR1052003	R1	CY8C29666-24PVXI	150/-65	0	500	19	0



SP483EBBAL	R	AR1052003	R1	CY8C29666-24PVXI	150/-65	0	1000	19	0
SP483EBBAL	R	AR1105003	R1	CY8C29666-24PVXI	150/-65	0	500	17	0
SP483ACGAN	R	MR102025	R1	CY8CTST200-48PVXI	150/-65	0	1000	30	0
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	150/-65	0	500	30	0
SP2822BGL	M	MR103024	R1	CY8C21534-24PVXAT	150/-65	0	1000	30	0
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	150/-65	0	500	30	0
SP483ACGAN	R	MR103028	R1	CY8C20546A-24PVXI	150/-65	0	1000	30	0
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	150/-65	0	500	30	0
SP28214GL	T	MR103030	R1	CY8C21534-24PVXI	150/-65	0	1000	30	0
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	150/-65	0	500	30	0
SP483EBBAL	R	MR104017	R1	CY8C27643-24PVXI	150/-65	0	1000	30	0
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	150/-65	0	500	30	0
SP483HAAGR	M	MR104061	R1A	CY14B101L-SP35XI	150/-65	0	1000	30	0
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	150/-65	0	500	30	0
SP483EBBAL	R	MR111004	R1	CY8C29666-24PVXIT	150/-65	0	1000	30	0
SP2822BGL	M	RR112001	R1	CY8C21534-12PVXET	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R1	CY8C21534-12PVXET	150/-65	0	1000	20	0
SP2822BGL	M	RR112001	R13	CP7407ATT	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R13	CP7407ATT	150/-65	0	1000	20	0
SP2822BGL	M	RR112001	R14	CP7407ATT	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R14	CP7407ATT	150/-65	0	1000	20	0
SP2822BGL	M	RR112001	R20	CY8C29466-12PVXET	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R21	CY8C21534-12PVXET	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R22	CY8C21534-12PVXET	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R27	CY8C29466-12PVXE	150/-65	0	500	20	0
SP2822BGL	M	RR112001	R28	CY8C29466-12PVXE	150/-65	0	500	20	0

Summary for Package Family: SSOP (Pb-Free)

66 records

Sum 2887 0

TQFP (Pb-Free)

AZ100SFDAL	R	101101	R4	CY8C3866AXI-040ES3	150/-65	0	500	80	0
AZ100SFDAL	R	101101	R5	CY8C3866AXI-040ES3	150/-65	0	500	80	0

AZ100RUBLN	R	110503	R1	CY7C68013A-100AXC	150/-65	0	500	80	0
AZ100RUBLN	R	110503	R1A	CY7C68013A-100AXC	150/-65	0	500	80	0
AZ100RUBLN	R	110503	R1B	CY7C68013A-100AXC	150/-65	0	500	80	0
AZ44SFHAN	JT	110901	R2	CY37032VP44-100AXC	150/-65	0	500	80	0
AZ44SFHAN	JT	110901	R2	CY37032VP44-100AXC	150/-65	0	1000	80	0
AZ52AAGAL	Q	MR101032	R1	CY29972AXIT	150/-65	0	1000	8	0
AZ32GXGAN	G	MR102032	R1	CY29940AXCT	150/-65	0	1000	30	0
AZ32BXGAN	Q	MR102038	R1	CY7C4251V-15AXC	150/-65	0	1000	30	0
AZ100AGAL	G	MR102065	R1	CY7C008V-25AXC	150/-65	0	500	30	0
AZ100AGAL	G	MR102065	R1	CY7C008V-25AXC	150/-65	0	1000	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	150/-65	0	500	30	0
AZ32GXGAN	G	MR103035	R1	CY29940AXCT	150/-65	0	1000	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	150/-65	0	500	30	0
AZ32LXGAN	Q	MR103049	R1	CY29946AXIT	150/-65	0	1000	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	150/-65	0	500	30	0
AZ32GXGAN	G	MR104031	R1	CY29940AXCT	150/-65	0	1000	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	150/-65	0	500	30	0
AZ100RUBLN	R	MR104032	R1	CY7C1347G-166AXC	150/-65	0	1000	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	150/-65	0	500	30	0
AZ32GXGAN	G	MR111026	R1	CY29940AXC	150/-65	0	1000	30	0
AZ160SBGAL	G	MR112037	R1	CY37256P160-83AXC	150/-65	0	500	30	0

Summary for Package Family: TQFP (Pb-Free)

23 records

Sum 1018 0

TSOP (Pb-free)

ZT28R5BBGL	JT	104815	R1	7C1995SMC	150/-65	0	500	75	0
ZT28R5BBGL	JT	104815	R1	7C1995SMC	150/-65	0	1000	75	0
ZT28R2BCLN	JT	104815	R3	CY62256NLL-55ZXI	150/-65	0	500	80	0
ZT28R2BCLN	JT	104815	R3	CY62256NLL-55ZXI	150/-65	0	1000	80	0
ZT28R2ABGN	JT	105202	R1	CY62256VLL	150/-65	0	500	87	0
ZT28R2ABGN	JT	105202	R1	CY62256VLL	150/-65	0	1000	82	0
ZT28R2ABGN	JT	105202	R2	CY62256NLL-55ZXAT	150/-65	0	500	79	0

ZT28R2ABGN	JT	105202	R2	CY62256NLL-55ZXAT	150/-65	0	1000	79	0
ZT28R2ABGN	JT	105202	R3	CY62256NLL-55ZXAT	150/-65	0	500	80	0
ZT28R2ABGN	JT	105202	R3	CY62256NLL-55ZXAT	150/-65	0	1000	80	0
ZT32RABALL	T	MR102037	R1	CY62138FV30LL-45ZXI	150/-65	0	1000	30	0
ZT28R4BGL	R	MR102053	R1	CY7C1399BNL-12ZXCT	150/-65	0	1000	30	0
ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	150/-65	0	500	30	0
ZT32RAEDLN	RA	MR103003	R1	CY62128EV30LL-45ZXI	150/-65	0	1000	29	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	150/-65	0	500	30	0
ZT28R6BGLL	R	MR103012	R1	CY7C199D-10ZXIT	150/-65	0	1000	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	150/-65	0	500	30	0
ZT32RABALL	T	MR103056	R1	CY62138FV30LL-45ZXI	150/-65	0	1000	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	150/-65	0	500	30	0
ZT32RAEDLN	RA	MR104004	R1	CY62128ELL-45ZXIT	150/-65	0	1000	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	150/-65	0	500	30	0
ZT32RABALL	T	MR104025	R1	CY62128ELL-45ZXI	150/-65	0	1000	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	150/-65	0	500	30	0
ZT28R2BBLN	R	MR104059	R1	CG6718AM	150/-65	0	1000	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	150/-65	0	500	30	0
ZT28R4BGL	R	MR104063	R1	CY7C1399BNL-12ZXC	150/-65	0	1000	29	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	150/-65	0	500	30	0
ZT28R2BBLN	R	MR111017	R1	CY62256NLL-55ZXIT	150/-65	0	1000	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	150/-65	0	500	30	0
ZT32RAEDLN	RA	MR111018	R1	CY62128EV30LL-45ZXI	150/-65	0	1000	30	0
<b>Summary for Package Family: TSOP (Pb-free)</b>			<b>30</b>	<b>records</b>					
<b>Sum</b>								<b>1395</b>	<b>0</b>
<b>TSOP I (Pb-Free)</b>									
ZB32RHCALN	JT	104815	R2	CY62128ELL-45ZAXI	150/-65	0	500	80	0
ZB32RHCALN	JT	104815	R2	CY62128ELL-45ZAXI	150/-65	0	1000	80	0
ZB32RHBLN	JT	105211	R1	CY62148ESL	150/-65	0	500	89	0
ZB32RHBLN	JT	105211	R1	CY62148ESL	150/-65	0	1000	84	0
ZB32RHABL	JT	105211	R2	CY62138FV30LL	150/-65	0	500	80	0

ZB32RHABLN	JT	105211	R2	CY62138FV30LL	150/-65	0	1000	80	0
ZB32RHABLN	JT	105211	R3	CY62128ELL	150/-65	0	500	80	0
ZB32RHABLN	JT	105211	R3	CY62128ELL	150/-65	0	1000	80	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	150/-65	0	500	30	0
ZB32RHBALN	R	MR103006	R1	CY62138FV30LL-45ZAXI	150/-65	0	1000	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	150/-65	0	500	30	0
ZB32RKALL	T	MR103025	R1	CG7086AM	150/-65	0	1000	30	0
ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	150/-65	0	500	30	0
ZB32RKALL	T	MR104023	R1	CY62128ELL-45ZAXIT	150/-65	0	1000	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	150/-65	0	500	30	0
ZB32RKALL	T	MR111069	R1	CY62128EV30LL-45ZAXI	150/-65	0	1000	30	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	150/-65	0	500	30	0
ZB32RKALL	T	MR112006	R1	CY62128EV30LL-45ZAXI	150/-65	0	1000	30	0

**Summary for Package Family: TSOP I (Pb-Free)**

**18 records**

**Sum 953 0**

**TSOP II (Pb-Free)**

ZW444YBCLL	JT	104814	R1	CY7C1041BN-15ZXI	150/-65	0	500	77	0
ZW444YBCLL	JT	104814	R1	CY7C1041BN-15ZXI	150/-65	0	1000	77	0
ZW444AICLL	JT	104814	R2	CY7C1021DV33-10ZSXI	150/-65	0	500	77	0
ZW444AICLL	JT	104814	R2	CY7C1021DV33-10ZSXI	150/-65	0	1000	77	0
ZW444WBDLN	JT	104814	R3	CY14B256LA-ZS45XI	150/-65	0	1000	77	0
ZW444WBELN	JT	104814	R4	CY7C1010DV33-10ZSXI	150/-65	0	500	75	0
ZW444WBELN	JT	104814	R4	CY7C1010DV33-10ZSXI	150/-65	0	1000	75	0
ZW444AKCLN	R	104907	R1	CY7C1041CV33	150/-65	0	500	95	0
ZW444AKCLN	R	104907	R1	CY7C1041CV33	150/-65	0	1000	85	0
ZW444AKCLN	R	104907	R2	CY7C1041CV33	150/-65	0	500	98	0
ZW444AKCLN	R	104907	R2	CY7C1041CV33	150/-65	0	1000	88	0
ZW444AKCLN	R	104907	R3	CY7C1041CV33	150/-65	0	500	98	0
ZW444AKCLN	R	104907	R3	CY7C1041CV33	150/-65	0	1000	82	0
ZW444AKBLN	R	110503	R2	CY7C1041DV3-12ZSXC	150/-65	0	500	80	0
ZW444AKBLN	R	110503	R2A	CY7C1341RC	150/-65	0	500	80	0

ZW444AKBLN	R	110503	R2B	CY7C1341RC	150/-65	0	500	80	0
ZW444PAALL	RA	110703	R1	CY14B101KA	150/-65	0	500	80	0
ZW444PAALL	RA	110703	R1	CY14B101KA	150/-65	0	1000	80	0
ZW44AAAAGL	RA	110703	R2	CY7C1021DV33-10ZSXI	150/-65	0	500	80	0
ZW44AAAAGL	RA	110703	R2	CY7C1021DV33-10ZSXI	150/-65	0	1000	80	0
ZW444PAALL	RA	110703	R3	CY14B101KA	150/-65	0	100	80	0
ZW444PAALL	RA	110703	R3	CY14B101KA	150/-65	0	500	80	0
ZW444AKDLN	JT	111410	R1	7A134101FC	150/-65	0	500	85	0
ZW444AKDLN	JT	111410	R1	7A134101FC	150/-65	0	1000	80	0
ZW444AHILL	JT	111410	R2	7A62126FC	150/-65	0	500	85	0
ZW444AHILL	JT	111410	R2	7A62126FC	150/-65	0	1000	85	0
ZW444AHILL	JT	111410	R3	7A62126FC	150/-65	0	500	85	0
ZW444AHILL	JT	111410	R3	7A62126FC	150/-65	0	1000	85	0
ZW444AJLN	R	AR1031002	R1	7A122001GC	150/-65	0	500	19	0
ZW444AJLN	R	AR1031002	R1	7A122001GC	150/-65	0	1000	19	0
ZW444AMLN	R	MR102040	R1	CY62146ELL-45ZSXA	150/-65	0	500	30	0
ZW444AMLN	R	MR102040	R1	CY62146ELL-45ZSXA	150/-65	0	1000	30	0
ZW544AALL	G	MR102050	R1	CY7C1069AV33-10ZXC	150/-65	0	1000	30	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	150/-65	0	500	30	0
ZW544AALL	G	MR103034	R1	CY7C1061AV33-10ZXC	150/-65	0	1000	30	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	150/-65	0	500	30	0
ZW444AAGLL	T	MR104024	R1	CY62146ELL-45ZSXIT	150/-65	0	1000	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	150/-65	0	500	30	0
ZW444WBCLN	R	MR104028	R1	CG6722AM	150/-65	0	1000	30	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	150/-65	0	500	30	0
ZW54BGALL	G	MR104049	R1	CY7C1061DV33-10ZSXI	150/-65	0	1000	30	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	150/-65	0	500	30	0
ZW44AAAAGL	RA	MR112046	R1	CY62147EV30LL-45ZSXIT	150/-65	0	1000	30	0
ZW444RCGN	R	RR104009	R1	7A621360B	150/-65	0	50	195	0
ZW444RCGN	R	RR104009	R1	7A621360B	150/-65	0	100	195	0

Summary for Package Family: TSOP II (Pb-Free)

45 records



**Sum** **3124** **0**

**TSSOP**

Z2412XAGB	M	MR102017	R1	W232-10XT	150/-65	0	1000	30	0
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**Summary for Package Family: TSSOP** **1** **records**

**Sum** **30** **0**

**TSSOP (Pb-Free)**

ZZ1620GBAN	RA	AR1023009	R1	CY2309CZXC-1HT	150/-65	0	500	17	0
ZZ1620GBAN	RA	AR1023009	R1	CY2309CZXC-1HT	150/-65	0	1000	17	0
ZZ1620GBAN	RA	MR102001	R1	CY2309ZXC-1HT	150/-65	0	1000	29	0
ZZ2014BGN	T	MR102058	R1	CY25404ZXI-005T	150/-65	0	1000	30	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	150/-65	0	500	29	0
ZZ1620GBAN	RA	MR103001	R1	CY2309ZXC-1HT	150/-65	0	1000	29	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	150/-65	0	500	30	0
ZZ1614HAN	T	MR103023	R1	CY22394FXCT	150/-65	0	1000	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	150/-65	0	500	30	0
ZZ1620GBAN	RA	MR104003	R1	CY22393FXI	150/-65	0	1000	29	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	150/-65	0	500	30	0
ZZ2014BGN	T	MR104026	R1	CY25404ZXI-005T	150/-65	0	1000	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	150/-65	0	500	30	0
ZZ1620GBAN	RA	MR111029	R1	CY22393FXCT	150/-65	0	1000	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	150/-65	0	500	30	0
ZZ2014BGN	T	MR111031	R1	CY25404ZXI-003T	150/-65	0	1000	30	0
ZZ2014BGN	T	MR112047	R1	CY25404ZXI-003T	150/-65	0	500	30	0

**Summary for Package Family: TSSOP (Pb-Free)** **17** **records**

**Sum** **480** **0**

**VFBGA (0.75-0.8, 0.3mm)**

BV48DAAALE	RA	MR102020	R1	CY62147EV30LL-45BVIT	150/-65	0	1000	30	0
BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	150/-65	0	1000	30	0
BV48ZEAAL	RA	MR103018	R1	CY62157EV30LL-45BVI	150/-65	0	500	30	0

**Summary for Package Family: VFBGA (0.75-0.8, 0.3mm)** **3** **records**

**Sum** **90** **0**

**VFBGA (0.75-0.8, 0.3mm, Pb-Free)**

BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	150/-65	0	500	80	0
BZ48ZBAALL	RA	091206	R1	CY621675EV18LL-55BVXI	150/-65	0	1000	80	0
BZ48ZBAALL	RA	091206	R2	CY621675EV18LL-55BVXI	150/-65	0	500	78	0
BZ48ZBAALL	RA	091206	R2	CY621675EV18LL-55BVXI	150/-65	0	1000	78	0
BZ48ZBAALL	RA	091206	R3	CY621675EV30LL-45BVXI	150/-65	0	500	77	0
BZ48ZBAALL	RA	091206	R3	CY621675EV30LL-45BVXI	150/-65	0	1000	77	0
BZ48CNAALL	G	103101	R1	CY62162DK	150/-65	0	500	77	0
BZ48CNAALL	G	103101	R1	CY62162DK	150/-65	0	1000	76	0
BZ48CNAALL	G	103101	R2	CY62162DK	150/-65	0	500	77	0
BZ48CNAALL	G	103101	R2	CY62162DK	150/-65	0	1000	77	0
BZ48CNAALL	G	103206	R1	CY7C62162DK	150/-65	0	500	77	0
BZ48CNAALL	G	103206	R1	CY7C62162DK	150/-65	0	1000	76	0
BZ48CNAALL	G	103206	R2	CY62162DK	150/-65	0	500	73	0
BZ48CNAALL	G	103206	R2	CY62162DK	150/-65	0	1000	73	0
BZ48CJALL	RA	104406	R1	CY62167DV30LL-55BVXI	150/-65	0	500	79	0
BZ48CJALL	RA	104406	R1	CY62167DV30LL-55BVXI	150/-65	0	1000	79	0
BZ48CJALL	RA	104406	R2	CY62167DV30LL-55BVXI	150/-65	0	500	80	0
BZ48CJALL	RA	104406	R2	CY62167DV30LL-55BVXI	150/-65	0	1000	80	0
BZ48CJALL	RA	104406	R3	CY62167DV30LL-55BVXI	150/-65	0	500	80	0
BZ48CJALL	RA	104406	R3	CY62167DV30LL-55BVXI	150/-65	0	1000	80	0
BZ48RMAALL	RA	105004	R1	CY7C1061DV33-10BVXI	150/-65	0	500	77	0
BZ48RMAALL	RA	105004	R1	CY7C1061DV33-10BVXI	150/-65	0	1000	77	0
BZ48RMAALL	RA	105004	R2	CY7C1061DV33-10BVXI	150/-65	0	500	80	0
BZ48RMAALL	RA	105004	R2	CY7C1061DV33-10BVXI	150/-65	0	1000	80	0
BZ48RMAALL	RA	110301	R2	CY7C1061DV33-10BVXI	150/-65	0	500	80	0
BZ48RMAALL	RA	110301	R2	CY7C1061DV33-10BVXI	150/-65	0	1000	80	0
BZ48RMAALL	RA	110301	R3	CY7C1061DV33-10BVXI	150/-65	0	500	77	0
BZ48RMAALL	RA	110301	R3	CY7C1061DV33-10BVXI	150/-65	0	1000	77	0



BZ100DGALL	RA	MR102012	R1	CYWB0120AB-BVXIT	150/-65	0	1000	30	0
BZ48CHAALL	G	MR102029	R1	CY62126EV30LL-45BVXIT	150/-65	0	1000	30	0
BZ48CFAALL	G	MR102034	R1	CY62157EV30LL-45BVXI	150/-65	0	1000	30	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	150/-65	0	500	30	0
BZ48ATALL	RA	MR103002	R1	CY62157DV30LL-70BVXIT	150/-65	0	1000	29	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	150/-65	0	500	29	0
BZ100BABLL	RA	MR103020	R1	CYDMX256A16-65BVXI	150/-65	0	1000	29	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	150/-65	0	500	30	0
BZ48CHAALL	G	MR103036	R1	CY62126EV30LL-55BVXE	150/-65	0	1000	30	0
BZ48ZEAAL	RA	MR103046	R1	CG6833AM	150/-65	0	500	30	0
BZ48ZEAAL	RA	MR103046	R1	CG6833AM	150/-65	0	1000	29	0
BZ48ZEAAL	RA	MR104005	R1	CG6833AMT	150/-65	0	500	29	0
BZ48ZEAAL	RA	MR104005	R1	CG6833AMT	150/-65	0	1000	29	0
BZ100BABLL	RA	MR104011	R1	CYDM128B16-55BVXIT	150/-65	0	500	29	0
BZ100BABLL	RA	MR104011	R1	CYDM128B16-55BVXIT	150/-65	0	1000	29	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	150/-65	0	500	30	0
BZ48ADAALL	G	MR104051	R1	CY62127DV30LL-55BVXI	150/-65	0	1000	30	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	150/-65	0	500	30	0
BZ48CQAALL	G	MR111065	R1	CY62136FV30LL-45BVXI	150/-65	0	1000	30	0
BZ48ABBBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	150/-65	0	500	30	0
BZ48ABBBLL	AT	MR111070	RI	CY62127DV30LL-55BVXIT	150/-65	0	1000	30	0

Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)

49

records

Sum

2804

0