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Continuity of document content

The fact that Infineon offers the following product as part of the Infineon product portfolio does not lead to any changes to this document. Future revisions will occur when appropriate, and any changes will be set out on the document history page.

Continuity of ordering part numbers

Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.

Cypress Semiconductor Package Qualification Report

**QTP# 044301 VERSION*A
September 2014**

**ALL SOIC Package (300mil)
100% Matte Tin
MSL3, 260C Solder Reflow Peak
PHIL-M**

**FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT
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PACKAGE QUALIFICATION HISTORY

QUAL REPORT	DESCRIPTION OF QUALIFICATION PURPOSE	DATE COMP.
044301	ALL (300mil) SOIC package using Sumitomo G600, 8290 DA Epoxy with 100% Matte Tin with Annealing Process, @ 260C Solder Reflow Peak, MSL3, assembled @ PHIL-M	Apr 05

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION	
Package Designation:	SZ183
Package Outline, Type, or Name:	18-Lead Plastic Small Outline IC Package (SOIC)
Mold Compound Name/Manufacturer:	Sumitomo G600
Mold Compound Flammability Rating:	V-O per UL94
Oxygen Rating Index:	None
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	100% Matte Tin
Die Backside Preparation Method/Metallization:	Grinding
Die Separation Method:	Sawing
Die Attach Supplier:	Ablestik
Die Attach Material:	8290
Die Attach Method:	Epoxy
Wire Bond Method:	Thermosonic
Wire Material/Size:	1.0mil
Thermal Resistance Theta JA °C/W:	98.75°C/W
Package Cross Section Yes/No:	N/A
Assembly Process Flow:	49-24999M
Name/Location of Assembly (prime) facility:	PHIL-M

ELECTRICAL TEST / FINISH DESCRIPTION	
Test Location:	Cypress Philippines (CML-R)
Fault Coverage:	100%

Note: Please contact a Cypress Representative for other packages availability

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Te st	Test Condition (Temp/Time)	Result P/F
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity MSL 3 192 Hrs., 30°C/60%RH+3IR-Reflow, 260°C+5, -0°C	P
Pressure Cooker	121°C, 100%RH Precondition: JESD22 Moisture Sensitivity MSL 3 192 Hrs., 30°C/60%RH+3IR-Reflow, 260°C+5, -0°C	P
High Accelerated Saturation Test (HAST)	130°C, 3.3V, 85%RH Precondition: JESD22 Moisture Sensitivity MSL 3 192 Hrs., 30°C/60%RH+3IR-Reflow, 260°C+5, -0°C	P
External Visual	MIL-PRF-38535, MILSTD-883, METHOD 2009	P
Solderability	J-STD-002, JESD22-B102	P
Acoustic Microscopy	J-STD-020	P
Adhesion of Lead Finish	MIL-STD-883, Method 2025	P
X-Ray	MIL-STD-883C, Method 2012,	P
SEM X-Section	MIL-STD-883, Method 883-2018-2	P

Reliability Test Data

QTP #: 044301

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
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STRESS: ACOUSTIC - MICROSCOPE, MSL3

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	15	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	15	0	
CYISM532ASXC (7C8SM532B)	9421605	610454226	PHIL-M	COMP	15	0	

STRESS: ADHESION OF LEAD FINISH

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	3	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	3	0	

STRESS: EXTRNAL VISUAL

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	15	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	15	0	

STRESS: X-RAY

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	15	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	15	0	

STRESS: SOLDERABILITY

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	3	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	3	0	

STRESS: SEM X-SECTION

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	COMP	5	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	COMP	5	0	

STRESS: HI-ACCEL SATURATION TEST. 130C, 5.5V, 85%RH, PRE COND 192 HRS 30C/60%RH, MSL3

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	128	49	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	128	50	0	

STRESS: PRESSURE COOKER TEST, 121C, 100%RH, PRE COND 192 HRS 30C/60%RH, MSL3

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	128	50	0	
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STRESS: TC COND. C -65C TO 150C, PRE COND 192 HRS 30C/60%RH, MSL3

CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	300	50	0	
CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	500	50	0	
CY7C63723-SXC (7C63720A)	2431971	610454227	PHIL-M	1000	50	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	300	50	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	500	49	0	
CY7C63723-SXC (7C63720A)	2431971	610454228	PHIL-M	1000	49	0	
CYISM532ASXC (7C8SM532B)	9421605	610454226	PHIL-M	300	49	0	
CYISM532ASXC (7C8SM532B)	9421605	610454226	PHIL-M	1000	49	0	

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Document History Page

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Rev.	ECN No.	Orig. of Change	Description of Change
**	4141235	HSTO	Initial Spec Release Initiate report as per memo LGQ-203.
*A	4517577	HSTO	Align qualification report based on the new template in the front page

Distribution: WEB

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