Please note that Cypress is an Infineon Technologies Company.
The document following this cover page is marked as “Cypress” document as this is the company that originally developed the product. Please note that Infineon will continue to offer the product to new and existing customers as part of the Infineon product portfolio.

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# 060904 VERSION*A
September 2014

<28-Lead TSOP NiPdAu
MSL3, 260C Reflow
CML-R

FOR ANY QUESTIONS ON THIS REPORT, PLEAE CONTACT
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PACKAGE QUALIFICATION HISTORY

QUAL REPORT		DESCRIPTION OF QUALIFICATION PURPOSE		DATE COMP.
060904		≤28-Lead TSOP, NiPdAu, MSL3, 260C Reflow assembled at CML-R		Apr 06

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION	
Package Designation:	ZT28
Package Outline, Type, or Name:	28-Lead Thin Shrunk Small Outline
Mold Compound Name/Manufacturer:	CEL 9200CYR / Hitachi
Mold Compound Flammability Rating:	UL94
Oxygen Rating Index:	V0
Leadframe Material:	Copper
Lead Finish, Composition / Thickness:	NiPdAu
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	100% Saw Through
Die Attach Supplier:	Dexter
Die Attach Material:	QMI 509
Die Attach Method:	Epoxy
Bond Diagram Designation	10-06224
Wire Bond Method:	Thermosonic
Wire Material/Size:	Au. 1.0 mil
Thermal Resistance Theta JA C/W:	55.79°C/W
Package Cross Section Yes/No:	N/A
Name/Location of Assembly (prime) facility:	CML-R

ELECTRICAL TEST / FINISH DESCRIPTION	
Test Location:	CML-R
Fault Coverage:	100%

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65 C to 150 C Precondition: JESD22 Moisture Sensitivity MSL3 192 Hrs, 30°C/60%RH+3IR-Reflow, 260°C+0, -5°C	P
Pressure Cooker Test	121°C, 100%RH Precondition: JESD22 Moisture Sensitivity MSL3 192 Hrs, 30°C/60%RH+3IR-Reflow, 260°C+0, -5°C	P
High Accelerated Saturation Test (HAST)	130°C, 5.5V, 85%RH Precondition: JESD22 Moisture Sensitivity MSL3 192 Hrs, 30°C/60%RH+3IR-Reflow, 260°C+0, -5°C	P
Acoustics Microscopy	J-STD-020	P
High Temperature Storage	150°C, no bias	P

Reliability Test Data

QTP #: 060904

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: ACOUSTIC, MSL3							
CY7C199C (7C1995SM)	4549047	610605973	CML-R	COMP	15	0	
CY7C199C (7C1995M)	4532568	610554593	CML-R	COMP	15	0	
CY7C199C (7C1995M)	4435881	610502917	CML-R	COMP	15	0	
STRESS: HI-ACCEL SATURATION TEST, 130C, 5.5V, 85%RH, PRE COND 192 HR 30C/60%RH, MSL3							
CY7C199C (7C1995M)	4422571	610556999	CML-R	128	49	0	
STRESS: HIGH TEMPERATURE STORAGE, 150C, no bias							
CY62256LL (7C62256EC)	4430155	610449376	CML-R	500	50	0	
CY62256LL (7C62256EC)	4430155	610449376	CML-R	1000	50	0	
STRESS: PRESSURE COOKER TEST, 121C, 100%RH, PRE COND 192 HR 30C/60%RH, MSL3							
CY7C199C (7C1995M)	4535674	610557289	CML-R	168	50	0	
STRESS: TC COND. C –65C TO 150C, PRE COND 192HR 30C/60%RH, MSL3							
CY7C199C (7C1995SM)	4549047	610605973	CML-R	300	50	0	
CY7C199C (7C1995M)	4532568	610554593	CML-R	300	50	0	
CY7C199C (7C1995M)	4435881	610502917	CML-R	300	50	0	

Document History Page

Document Title: QTP#060904: <28-Lead TSOP NiPdAu MSL3, 260C Reflow CML-R
Document Number: 001-89486

Rev.	ECN No.	Orig. of Change	Description of Change
**	4142934	HSTO	Initial Spec Release Initiate report as per memo LGQ-503
*A	4516872	HSTO	Align qualification report based on the new template in the front page

Distribution: WEB

Posting: None