Cypress Semiconductor
Automotive Product Qualification Report

QTP# 155006 VERSION **
May 2017

Automotive TR20001C Device Family 130nm Technology, TI 300mm Wafer Fab DMOS6	
CY15B128J	128-KBIT (16K X 8) AUTOMOTIVE SERIAL (I2C) F-RAM
CY15B128Q	128-KBIT (16K X 8) AUTOMOTIVE SERIAL (SPI) F-RAM
CY15B256J	256-KBIT (32K X 8) AUTOMOTIVE SERIAL (I2C) F-RAM
CY15B256Q	256-KBIT (32K X 8) AUTOMOTIVE SERIAL (SPI) F-RAM
CYEL15B256J	256-KBIT (32K X 8) AUTOMOTIVE SERIAL (I2C) F-RAM

FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT
reliability@cypress.com or via a CYLINK CRM CASE

Prepared By:
Josephine Pineda (JYF)
Staff Reliability Engineer

Reviewed By:
Yusaku Ohta (YUOH)
Reliability Manager

Approved By:
David Hoffman (DHH)
Reliability Director

PACKAGE/PRODUCT QUALIFICATION HISTORY

QTP Number	Description of Qualification Purpose	Date
155006	Qualification of TI FR130 DMOS6 (300mm wafer fab) Foundry using Automotive TR20001C (TA20001C, 256kb Automotive 2T2C F-RAM Product)	May 2017

PRODUCT DESCRIPTION (for qualification)	
Qualification Purpose: Qualify TI FR130 DMOS6 (300mm wafer fab) Foundry using Automotive TR20001C (TA20001C, 256kb Automotive 2T2C F-RAM Product)	
Marketing Part #:	CY15B128J/CY15B128Q/ CY15B256J/ CY15B256Q
Device Description:	128-KBIT (16K X 8) and 256-KBIT (32K X 8) Automotive Serial F-RAM
Cypress Division:	Cypress Semiconductor Corporation – Memory Products Division (MPD)

TECHNOLOGY/FAB PROCESS DESCRIPTION			
Number of Metal Layers:	Proprietary*	Metal Composition:	Proprietary*
Passivation Type and Thickness:			Proprietary*
Generic Process Technology/Design Rule (µ-drawn):			130nm
Gate Oxide Material/Thickness (MOS):			Proprietary*
Name/Location of Die Fab (prime) Facility:			Texas Instruments / Dallas
Die Fab Line ID/Wafer Process ID:			DMOS 6 / E035.1

***Texas Instruments' proprietary information is available with signed NDA.**

PACKAGE AVAILABILITY

PACKAGE	WIRE TYPE	ASSEMBLY FACILITY SITE	REFERENCE
8L SOIC (150 mils)	Au	UTL-Thailand (UT)	QTP# 141703

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION	
Package Designation:	SW815, SZ815
Package Outline, Type, or Name:	8L SOIC (150 mils)
Mold Compound Name/Manufacturer:	G600 / Sumitomo
Mold Compound Flammability Rating:	UL-94 V-0
Mold Compound Alpha Emission Rate:	<0.1
Oxygen Rating Index: >28%	53%
Lead Frame Designation:	FMP
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	Matte Sn
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Laser + Wafer Saw
Die Attach Supplier:	Henkel
Die Attach Material:	8600
Bond Diagram Designation	001-92447
Wire Bond Method:	Thermosonic
Wire Material/Size:	Au / 0.8 mil
Thermal Resistance Theta JA °C/W:	146 °C/W
Package Cross Section Yes/No:	Yes
Assembly Process Flow:	001-97607
Name/Location of Assembly (prime) facility:	UTAC, Thailand (UT)
MSL Level	MSL3
Reflow Profile	260C

ELECTRICAL TEST / FINISH DESCRIPTION	
Test Location:	UTAC, Thailand

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Acoustic Microscopy	J-STD-020 Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
Constructional Analysis	Criteria: Meet external and internal characteristics of Cypress package	P
Data Retention (Plastic)	150°C, non-biased	P
Dye Penetrant Test	Test to determine the existence and extent of cracks, Criteria: No Package Crack	P
Electrostatic Discharge Charge Device Model (ESD-CDM)	AEC-Q100-011 250V, 500V (750V corner pins)	P
Electrostatic Discharge Human Body Model (ESD-HBM)	AEC-Q100-002 500V, 1,000V, 2,000V	P
High Accelerated Saturation Test (HAST)	JEDEC STD 22-A110: 130°C, 85% RH, 3.6V Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
High Temperature Operating Life Early Failure Rate	AEC-Q100-008 and JESD22-A108, 125C Dynamic Operating Condition, Vcc = 3.6V	P
High Temperature Operating Life Latent Failure Rate	AEC-Q100-008 and JESD22-A108, 125C Dynamic Operating Condition, Vcc = 3.6V	P
Lead Integrity	JESD22-B105, MIL STD 883	P
NVM Endurance /Data Retention (Plastic)	AEC-Q100-005, 25°C/85°C/125°C, non-biased	P
NVM Endurance / High Temperature Operating Life	AEC-Q100-008 and JESD22-A108, 125C Dynamic Operating Condition, Vcc = 3.6V	P
Physical Dimension	JESD22B100 and B108	P
Post Temperature Cycle Wire Bond Pull	Mil-Std 883, Method 2011	P
Pressure Cooker	JESD22-A102:121°C /100%RH, 15 PSIG Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
Pre/Post LFR AC/DC Char	AC/DC Critical Parameter Char at 0 hour/1000hrs	P
Solderability	JESD22-B102	P
Static Latch-up	AEC-Q100-004 +/-100mA, 125°C	P
Temperature Cycle	JESD22- A104, -65°C to 150°C Precondition: JESD22-A113 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P

RELIABILITY FAILURE RATE SUMMARY

Stress/Test	Device Tested/ Device Hours	# Fails	Activation Energy	Thermal AF[3]	Failure Rate
High Temperature Operating Life Early Failure Rate	12, 394 Devices	0	N/A	N/A	0 PPM
High Temperature Operating Life Long Term Failure Rate	740,000 DHRs	0	0.7	55	22 FIT

[1] Assuming an ambient temperature of 55°C and a junction temperature rise of 15°C.
[2] Chi-squared 60% estimations used to calculate the failure rate.
[3] Thermal Acceleration Factor is calculated from the Arrhenius equation

$$AF = \exp\left[\frac{E_A}{k}\left[\frac{1}{T_2} - \frac{1}{T_1}\right]\right]$$

where:

E_A =The Activation Energy of the defect mechanism.
K = Boltzmann's constant = 8.62×10^{-5} eV/Kelvin.
T_1 is the junction temperature of the device under stress and T_2 is the junction temperature of the device at use conditions.

Reliability Test Data

QTP #: 155006

Device	Package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: ACOUSTIC, MSL3								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	25	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	25	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	COMP	25	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	COMP	25	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	COMP	25	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	COMP	25	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	COMP	25	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	COMP	25	0	
STRESS: CONSTRUCTIONAL ANALYSIS								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	5	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	5	0	
STRESS: DATA RETENTION,150C								
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	
STRESS: DYE PENETRANT								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	COMP	15	0	
STRESS: ENDURANCE AND DATA RETENTION, 25C								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	500	78	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	78	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	
STRESS: ENDURANCE AND DATA RETENTION, 85C								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	

Reliability Test Data

QTP #: 155006

Device	Package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: ENDURANCE AND DATA RETENTION, 125C								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	79	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	79	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	
STRESS: ENDURANCE AND LATENT FAILURE RATE, 125C								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	
STRESS: ESD-CHARGE DEVICE MODEL								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	250	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	500	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	250	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	500	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	250	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	500	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	250	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	500	3	0	
STRESS: ESD-HUMAN BODY CIRCUIT								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	500	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	1000	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	2000	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	500	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	1000	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	2000	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	500	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	1000	3	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	2000	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	500	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	1000	3	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	2000	3	0	
STRESS: HIGH ACCELERATED SATURATION TEST (130C, 85%RH, with MSL3 Preconditioning)								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	192	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	96	80	0	

Reliability Test Data

QTP #: 155006

Device	Package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: HIGH ACCELERATED SATURATION TEST (130C, 85%RH, with MSL3 Preconditioning)								
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	192	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	192	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	192	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	192	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	192	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	192	80	0	
STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE, 125C								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	96	1999	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	96	1999	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	96	1997	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	96	1999	0	
CY15B256Q (7A15256B08C)	8L SOIC	2645002	611709199	UT-Thailand	96	4400	0	
STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-LATENT FAILURE RATE, 125C								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	250	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	250	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	250	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	250	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	1000	80	0	
STRESS: LEAD INTEGRITY								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	5	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	5	0	
STRESS: PRESSURE COOKER TEST (121C,100%RH) , with MSL3 Preconditioning								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	168	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	168	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	168	80	0	

Reliability Test Data

QTP #: 155006

Device	Package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: PRESSURE COOKER TEST (121C,100%RH) , with MSL3 Preconditioning								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	168	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	168	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	168	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	96	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	168	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	96	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	168	80	0	
STRESS: PHYSICAL DIMENSION								
CY15B102Q7 (7A1502B9D)	8L SOIC	2553000	611600876	UT-Thailand	COMP	10	0	
CY15B102Q7 (7A1502B9D)	8L SOIC	2602005	611602793	UT-Thailand	COMP	10	0	
CY15B102N (7A1502B06D)	44L TSOP	2553000	611607532	JT-China	COMP	30	0	
CY15B102Q7 (7A1502B9D)	8L SOIC	2538007	611617892	UT-Thailand	COMP	10	0	
STRESS: POST TCT BOND PULL								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	5	0	
STRESS: PRE/POST LFR CRITICAL PARAMETERS								
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	0	32	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611623033	UT-Thailand	1000	32	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	0	32	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	32	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	0	32	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	32	0	
STRESS: STATIC LATCH-UP (+/-100mA 125C)								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	6	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	6	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	COMP	6	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	COMP	6	0	
STRESS: SOLDERABILITY								
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611615108	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611615109	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	COMP	15	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	COMP	15	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	COMP	15	0	

Reliability Test Data

QTP #: 155006

Device	Package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: TEMPERATURE CYCLE CONDITION C（-65C TO 150C）, with MSL3 Preconditioning								
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2625001	611628349	UT-Thailand	1000	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2625001	611628350	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632730	UT-Thailand	1000	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632731	UT-Thailand	1000	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	500	80	0	
CY15B256Q (7A15256B08C)	8L SOIC	2616000	611632733	UT-Thailand	1000	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	500	80	0	
CY15B256J (7A15256B10C)	8L SOIC	2616000	611632732	UT-Thailand	1000	80	0	

Document History Page

Document Title: QTP# 155006: Automotive TR20001C Device Family 130nm Technology, TI 300mm Wafer Fab DMOS 6
Document Number: 002-19589

Rev.	ECN No.	Orig. of Change	Description of Change
**	5728684	JYF	Initial Release
*A	8169799	SUZH	Added CYEL15B256J.