

# Cypress Semiconductor Product Qualification Report

QTP#143905 VERSION \*\*  
January, 2017

<b>1Mb and 2Mb F-RAM Memory Product Qualification 130nm Technology, TI 300mm wafer Fab DMOS 6</b>	
<b>FM25V20A-G</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory</b>
<b>FM25V20A-GTR</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory</b>
<b>FM25V20A-DG</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory</b>
<b>FM25V20A-DGTR</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory</b>
<b>FM25V20A-DGQ</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory with Extended Temperature</b>
<b>FM25V20A-DGQTR</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory with Extended Temperature</b>
<b>FM25V20A-PG</b>	<b>2Mb (256Kx8bits) Serial F-RAM Memory</b>
<b>FM28V202A-TG</b>	<b>2Mb (128Kx16bits) Parallel F-RAM Memory</b>
<b>FM28V202A-TGTR</b>	<b>2Mb (128Kx16bits) Parallel F-RAM Memory</b>
<b>FM28V102A-TG</b>	<b>1Mb (64Kx16bits) Parallel F-RAM Memory</b>
<b>FM28V102A-TGTR</b>	<b>1Mb (64Kx16bits) Parallel F-RAM Memory</b>

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

<b>QTP Number</b>	<b>Description of Qualification Purpose</b>	<b>Date</b>
143905	TI FR130 DMOS5 (200mm wafer fab) to DMOS6 (300mm wafer fab) foundry transfer using the TR20005B (2Mb industrial 2T2C F-RAM product)	January 2017

<b>PRODUCT DESCRIPTION (for qualification)</b>	
Qualification Purpose: Qualification of 130nm FM25V20A-G TR20005 2Mbit 2T2C FRAM foundry transfer from DMOS5(200mm wafer fab) to DMOS6(300mm wafer fab).	
Marketing Part #:	FM25V20A-G, FM25V20A-GTR, FM25V20A-DG, FM25V20A-DGTR, FM25V20A-DGQ, FM25V20A-DGQTR, FM25V20A-PG, FM28V202A-TG, FM28V202A-TGTR, FM28V102A-TG, FM28V102A-TGTR
Device Description:	1Mb and 2Mb F-RAM Serial and Parallel Memory
Cypress Division:	Cypress Semiconductor Corporation – Memory Products Division (MPD)

<b>TECHNOLOGY/FAB PROCESS DESCRIPTION</b>			
Number of Metal Layers:	Proprietary*	Metal Composition:	Proprietary*
Passivation Type and Thickness:	Proprietary*		
Generic Process Technology/Design Rule (□-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

<b>PACKAGE</b>	<b>ASSEMBLY FACILITY SITE</b>
8-pin SOIC	UTAC, Thailand (UT)
8-pin PDIP	UTAC, Thailand (UT)
8-pin TDFN	UTAC, Thailand (UT)
44-pin TSOPII	JCET, China (JT)

<b>MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION</b>	
Package Designation:	SZ820
Package Outline, Type, or Name:	SOIC 8L (208mils)
Mold Compound Name/Manufacturer:	G600 / Sumitomo
Mold Compound Flammability Rating:	UL 94 V=0 pass
Mold Compound Alpha Emission Rate:	<0.1
Oxygen Rating Index: >28%	53%
Lead Frame Designation:	FMP
Lead Frame Material:	Copper
Substrate Material:	N/A
Lead Finish, Composition / Thickness:	Matte Sn
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Wafer Saw
Die Attach Supplier:	Henkel
Die Attach Material:	8200T
Bond Diagram Designation	001-86122
Wire Bond Method:	Thermosonic
Wire Material/Size:	CuPd / 0.8 mil
Thermal Resistance Theta JA °C/W:	114 C/W
Package Cross Section Yes/No:	Yes
Assembly Process Flow:	001-94050M
Name/Location of Assembly (prime) facility:	UTAC, Thailand (UT)
MSL LEVEL	MSL3
REFLOW PROFILE	260 C

<b>ELECTRICAL TEST / FINISH DESCRIPTION</b>	
Test Location:	UTAC, Thailand / KYEC, Taiwan

**Note:** Please contact a Cypress Representative for other package availability.

### RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Data Retention (Plastic)	125 C, non-biased JESD22-A117 and JESD22-A103	P
Endurance Test	MIL-STD-883, Method 883-1033	P
High Temperature Operating Life Early Failure Rate	Dynamic Operating Condition, Vcc = 3.6V, 125 C JESD22-A108	P
High Temperature Operating Life Latent Failure Rate	Dynamic Operating Condition, Vcc = 3.6V, 125 C JESD22-A108	P
High Temperature Steady State Life	Static Operating Condition, Vcc = 3.6V, 125 C JESD22-A108	P
Low Temperature Operating Life Cold Life Test	Dynamic Operating Condition, Vcc = 4.3V, -30 C, f = 4MHz JESD22-A108	P
Read and Record Life Test	Dynamic Operating Condition, Vcc = 4.3V, -30 C	P
Long Life Verification	Dynamic Operating Condition, Vcc = 3.6V, 125 C JESD22-A108	P
High Accelerated Saturation Test (HAST)	JEDEC STD 22-A110: 130C, 85%RH, nnV Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 C, 60% RH)	P
Pressure Cooker Test	JESD22-A102: 121 C, 100%RH, 15 PSIG Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 C, 60% RH)	P
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65 C to 150 C Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 C, 60% RH)	P
High Temp Storage	JESD22-A103: 150 C, no bias Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 C, 60% RH)	P
Electrostatic Discharge Human Body Model (ESD-HBM)	(1,100V, 2,200V, 3,300V) JEDEC EIA/JESD22-A114-B	P
Electrostatic Discharge Charge Device Model (ESD- CDM)	(500V, 750V, 1,000V, 1,250V) JESD22-C101	P
Static Latch up	125C, ± 140mA JESD78B	P

### RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

<b>Stress/Test</b>	<b>Test Condition (Temp/Bias)</b>	<b>Result P/F</b>
Neutron Emission (SER)	Vccnom, room temperature, JESD89	<1.47 FIT/Mb
Neutron Single Latch-up (SEL)	Vccmax, Data Sheet max temperature, JESD89	No event

### RELIABILITY FAILURE RATE SUMMARY

Stress/Test	Device Tested/ Device Hours	# Fails	Activation Energy	Thermal AF <sup>3</sup>	Failure Rate
High Temperature Operating Life Early Failure Rate	14,950 Devices	0	N/A	N/A	0 PPM
High Temperature Operating Life <sup>1,2</sup> Long Term Failure Rate	534,000 DHRs	0	0.7	55	31 FIT

<sup>1</sup> Assuming an ambient temperature of 55°C and a junction temperature rise of 15°C.

<sup>2</sup> Chi-squared 60% estimations used to calculate the failure rate.

<sup>3</sup> 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 =  $8.62 \times 10^{-5}$  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 #: 143905

Device	package	Fab Lot#	Assy Lot#	Assy Loc	Duration	Samp	Rej	Failure Mechanism
<b>STRESS: ACOUSTIC, MSL3</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	15	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	15	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	15	0	
<b>STRESS: TEMPERATURE CYCLE CONDITION C (-65C TO 150C) , with MSL3 Preconditioning</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	500	80	0	
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	1000	80	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	500	79	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	1000	79	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	500	80	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	80	0	
<b>STRESS: PRESSURE COOKER TEST(121C,100%RH, with MSL3 Preconditioning)</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	168	80	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	168	80	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	168	80	0	
<b>STRESS: HIGH ACCELERATED SATURATION TEST(130C, 85%RH, with MSL3 Preconditioning)</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	96	28	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	96	27	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	96	28	0	
<b>STRESS: HIGH TEMPERATURE STORAGE, 150C</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	500	80	0	
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	1000	80	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	500	80	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	1000	80	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	500	80	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	80	0	
<b>STRESS: ESD-MACHINE MODEL</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	200	5	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	200	5	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	200	5	0	
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	200	5	0	
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	200	5	0	
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	200	5	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	200	5	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	200	5	0	
<b>STRESS: ESD-CHARGE DEVICE MODEL(500V)</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	9	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	9	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	9	0	
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	9	0	
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	9	0	
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	9	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	9	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	9	0	
<b>STRESS: ESD-CHARGE DEVICE MODEL(750V)</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0	
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0	
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0	
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0	
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0	
<b>STRESS: ESD-CHARGE DEVICE MODEL(1000V)</b>								
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0	
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0	

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FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: ESD-CHARGE DEVICE MODEL(1250V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: ESD-CHARGE DEVICE MODEL(1500V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: ESD-CHARGE DEVICE MODEL(1750V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: ESD-CHARGE DEVICE MODEL(2000V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0

**STRESS: ESD-HUMAN BODY CIRCUIT (1100V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: ESD-HUMAN BODY CIRCUIT (2200V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	8	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	8	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	8	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	8	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	8	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	8	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	8	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	8	0

**STRESS: ESD-HUMAN BODY CIRCUIT (3300V)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0



CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: STATIC LATCH-UP (+/-140mA 125C)**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2443004	611444239	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611600876	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2602005	611602793	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617892	UT	COMP	3	0
CY15B102Q7-SXE	SZ820AAZAR	2538007	611617893	UT	COMP	3	0

**STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE, 125C**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	96	1500	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	96	941	0
FM25V20A-G	SZ820ABASC	2444010	611513111	UT	96	784	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	96	1442	0
CY15B102Q7-SXE	SZ820AAZAR	2553000	611627196	UT	96	3500	0
CY15B102Q7-SXE	SZ820AAZAR	2629051	611627197	UT	96	3283	0
FM25V20A-G	SZ820ABASC	2629051	611627197	UT	96	3500	0

**STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-LATENT FAILURE RATE, 125C**

FM25V20A-G	SZ820ABASC	2445005	611503699	UT	116	178	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	178	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	116	178	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	1000	178	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	116	178	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	178	0

**STRESS: EFR-REGULATOR ON**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	96	45	0
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**STRESS: AGED BOND STRENGTH**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	COMP	3	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	COMP	3	0

**STRESS: DATA RETENTION, 125C**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	500	77	0
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	1000	75	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	500	77	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	1000	77	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	500	77	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	77	0

**STRESS: ENDURANCE and DATA RETENTION**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	168	77	0
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	500	77	0
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	1000	77	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	168	77	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	500	77	0
FM25V20A-G	SZ820ABASC	2444010	611503700	UT	1000	76	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	168	77	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	500	77	0
FM25V20A-G	SZ820ABASC	2445005	611503699	UT	1000	77	0

**STRESS: LTOL READ & RECRORD, -30C**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	32	0
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**STRESS: LOW TEMPERATURE OPERATING LIFE, -30C**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	500	32	0
FM25V20A-G	SZ820ABASC	2443004	611503131	UT	1000	32	0

**STRESS: SOFT ERROR TEST-NEUTRON/PROTON/SEL**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
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**STRESS: SOFT ERROR TEST-ALPHA-PATICLE/SEL**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
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**STRESS: PRE/POST LFR CRITICAL PARAMETER**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	12	0
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**STRESS: CONSTRUCTIONAL ANALYSIS**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	5	0
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**STRESS: DYNAMIC/LATCH-UP**

FM25V20A-G	SZ820ABASC	2443004	611503131	UT	COMP	3	0
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TECHNOLOGY, TI 300MM WAFER FAB DMOS 6

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**	5580521	SUZH	Initial Release