RESTRICTED

Qualification Test Report

Date: June 01, 2022

Title: QTP#202121001: PSoC 4100M / PSoC 4200M Cu BEOL using S8PFHD-10R Technology fabricated at Fab25

Reason for choosing the following test vehicles:	**Affected device**
Scope of qualifications:	**CY8C4245 / CY8C4246 / CY8C4247**
Assessment of Q-Results:	**Pass**
QTP # :	**202121001**

Stress Test	Abbreviation	Test Condition	Readout	CY8C4247AZI7-M475 TV 1	CY8C4247AZI7-M475 TV 1.01	CY8C4247AZI7-M475 TV 2
				fails / stressed	fails / stressed	fails / stressed
DATA RETENTION Per internal spec	DR	150°C	500 hours 1000 hours	0/80 0/80	-	0/79 0/79
EARLY LIFE FAILURE RATE JESD22-A108	EFR	150°C	48 hours	0/1506	-	-
ENDURANCE JESD22-A117	ED	25°C	100000 cycles	0/80	-	0/79
ESD (CDM) SENSITIVITY JS-002	CM	-	500 volts 750 volts 1000 volts	-	0/3 0/3 0/3	-
ESD (HBM) SENSITIVITY IEC/EN 61000-4-2, JS-001	ES	-	1100 volts 2200 volts 3300 volts	-	0/3 0/3 0/3	-
INHERENT LIFE FAILURE RATE JESD22-A108	LFR	150°C	80 hours 500 hours	0/120 0/120	-	-
TIME ZERO CSAM J-STD-020E	CSAM_PRE	-	Time Zero	0/22	-	-
POST CSAM J-STD-020E	CSAM_POST	-	Post MSL3	0/22	-	-
PRE CONDITIONING	PC	260°C -0 / +5°C MSL3_30°C / 60%RH for 192 hrs	As per requirement	0/240	-	-
PRESSURE COOKER TEST JESD22-A102	PCT	121°C / 100%RH / 15psig	96 hours 168 hours	0/80 0/80	-	-
SOFT ERROR RATE JESD89-1/2/3	SER	-	As per requirement	0/1	-	-
STATIC LATCHUP SENSITIVITY	S_LU	-	+/-100mA, 125C +/-140mA, 125C +/-140mA, 85C +/-200mA, 855C	0/3 0/2 0/2 0/2	-	-
TEMP CYCLE JESD22-A104,JESD47	TCT	C -65°C to 150°C	500 cycles	0/80	-	-
UNBIASED HAST TEST JESD22-A118	UHAST	130°C / 85%RH	96 hours 192 hours	0/79 0/79	-	-

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Rev.	ECN No.	Orig of Changes.	Description of Change
**	7768856	SINTOS	Initial Spec Release