

Report No: 16I0A0006_I

EFAP-S250 of FWS-7520 Power Electronics Test Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____			
Test Result Summary				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	QE manager	Test Engineer
2016-06-30	KJ Wang	Mike Lee Louie Lee

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1. Project

EFAP-S250 AC-DC Power Supply for FWS-7520
P/N: 1255302502

2. Power Manufacturer

ETASIS

3. Team Member

PM : Jill Chu ; H/W : Jason Chen

4. Test Equipment

- 4.1. PCB: FWB-7520 Rev A0.3
- 4.2. CPU: Intel ® Xeon ® CPU D-1548 @ 2.00GHz
- 4.3. Memory: innodisk DDR4 32GB 2133 REG DIMM - SEC 507 K4A8G04 5WBBCPB x4
- 4.4. SATA HDD: TOSHIBA 2.5" SATA HDD 320GB - MQ01ABD032
- 4.5. LCD Monitor: ASUS VE228 1920*1080

5. Test Item

Test Item	Test Condition / Specification		Sanction	
			Measured	Result
5.1. AC Input Current	I/P:100VAC	5A	2.46A	PASS
	I/P:264VAC	2.5A	0.91A	PASS
5.2. Input Frequency & Voltage	I/P:90VAC/47HZ	■ON □ OFF	-	PASS
	I/P:90VAC/63HZ	■ON □ OFF	-	PASS
	I/P:264VAC/47HZ	■ON □ OFF	-	PASS
	I/P:264VAC/63HZ	■ON □ OFF	-	PASS
5.3. Efficiency	I/P:115VAC FULL LOAD	@82%Min	82.27	PASS
5.4. Line Regulation	I/P:90VAC~264VAC O/P: FULL LOAD	<±1%(3.3V)	0%	PASS
		<±1%(5V)	0%	PASS
		<±1%(12V)	0%	PASS
		<±1%(-12V)	0%	PASS
		<±1%(5VSB)	0%	PASS
5.5. Load Regulation	I/P:115VAC O/P:MINLOAD	<±5%(3.3V)	3.383/2.52%	PASS
		<±5%(5V)	5.158/3.16%	PASS
		<±5%(12V)	12.200/1.67%	PASS
		<±5%(-12V)	11.732/-2.23%	PASS
		<±5%(5VSB)	5.115/2.3%	PASS
	I/P:230VAC O/P:MINLOAD	<±5%(3.3V)	3.383/2.52%	PASS
		<±5%(5V)	5.158/3.16%	PASS
		<±5%(12V)	12.200/1.67%	PASS
		<±5%(-12V)	11.732/-2.23%	PASS
		<±5%(5VSB)	5.115/2.3%	PASS
	I/P:115VAC O/P: FULL LOAD	<±5%(3.3V)	3.245/-1.67%	PASS
		<±5%(5V)	4.943/-1.14%	PASS
		<±5%(12V)	11.980/-0.17%	PASS
		<±5%(-12V)	11.722/-2.32%	PASS
		<±5%(5VSB)	4.973/-0.54%	PASS
	I/P:230VAC O/P: FULL LOAD	<±5%(3.3V)	3.245/-1.67%	PASS
<±5%(5V)		4.943/-1.14%	PASS	
<±5%(12V)		11.980/-0.17%	PASS	
<±5%(-12V)		11.725/-2.29%	PASS	
<±5%(5VSB)		4.973/-0.54%	PASS	
5.6. Short Circuit Protect	I/P:115VAC O/P:MIN LOAD	5V&GND Short	-	PASS
	I/P:230VAC O/P:MIN LOAD	5V&GND Short	-	PASS
5.7. Ripple & Noise	I/P:115VAC O/P:FULL LOAD	≤ 50mv(3.3V)	28.4mv	PASS
		≤ 50mv(5V)	22.0mv	PASS
		≤ 120mv(12V)	23.6mv	PASS
		≤ 120mv(-12V)	39.2mv	PASS
		≤ 50mv(5VSB)	28.0mv	PASS
5.8. Turn-On Delay Time	I/P:115VAC O/P:FULL LOAD	2500mS(MAX)(5V)	1377ms	PASS
5.9. Hold up Time	I/P:115VAC O/P:FULL LOAD	12mS(MIN) (5V)	32.4ms	PASS
5.10. Rise Time	I/P:115VAC O/P:FULL LOAD	20mS(MAX) (3.3V)	3.379ms	PASS
	I/P:115VAC O/P:FULL LOAD	20mS(MAX) (5V)	4.082ms	PASS
5.11. Turn on Overshoot	Turn on overshoot shall not exceed 10% over nominal voltages@ 20 % LOAD		-	PASS
5.12. Turn off Undershoot	Turn off undershoot shall not exceed 10% over nominal voltages		-	PASS

5.13. System Power Consumption Test	No Run Burnintest v3.3	I/P:100VAC 0.41A 39.9W	O/P: 3.3V/1.10A 5V/2.19A 12V/1.32A -12V/0.03A 5VSB/0.08A 31.18W	PASS
	Run Burnintest v3.3	I/P:100VAC 0.87A 85.5W	O/P: 3.3V/1.10A 5V/2.27A 12V/4.62A -12V/0.03A 5VSB/0.08A 71.18W	PASS
	Off Mode	I/P:100VAC 0.12A 5.4W		PASS