

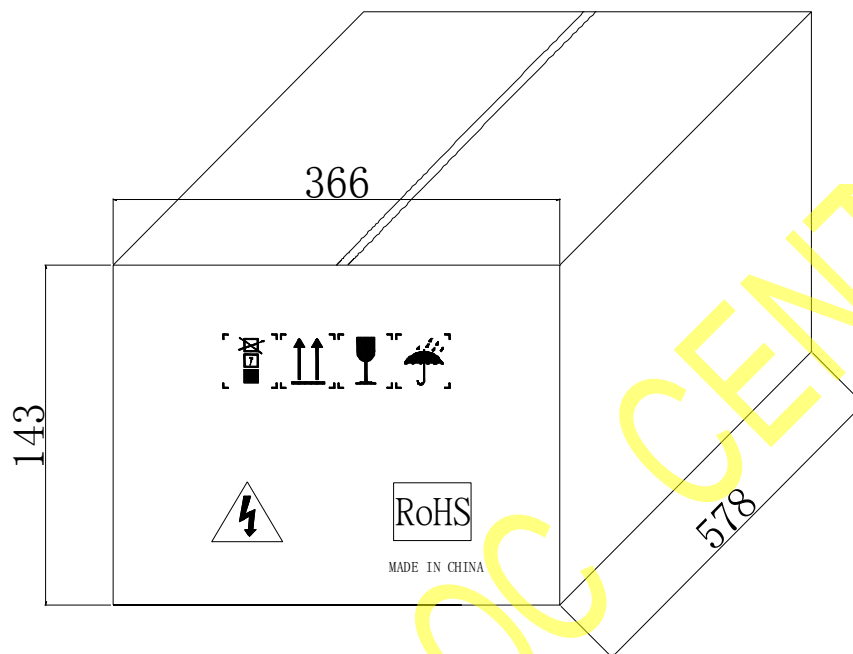


ASPOWER

深圳欧陆通电子股份有限公司

12.0 PACKAGE

12.1 Outline Diagram of Carton



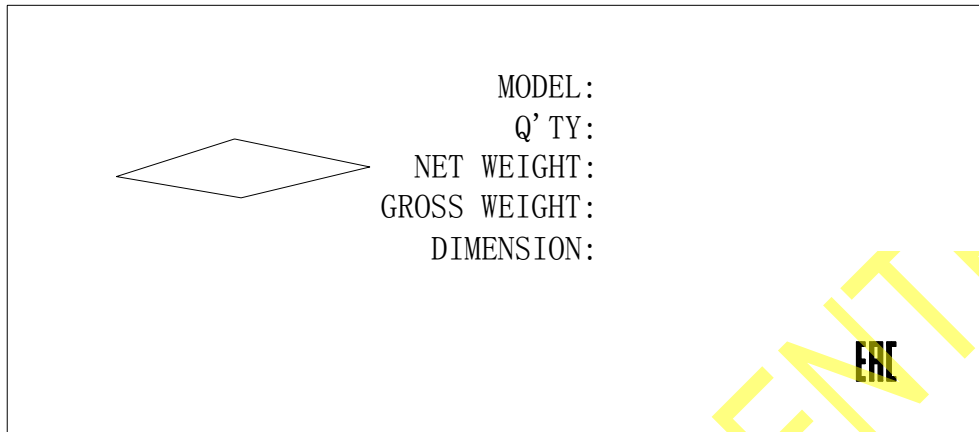
Note:

Material: K=K, five layers of corrugated paper.

12.2 Side Label



12.3 Front Label



13.0 SOFTWARE

13.1 Data Precision Requirement

Some data read from power supply should have a precision requirement as below table:

Table30. Required Accuracy (100-127Vac/200-240Vac @ 50Hz~60Hz or 160-340Vdc)

Output Load Condition	<10%	10%-20%	20%-100%
Read_VIN(88h)	±5%	±5%	±5%
Read_IIN(89h)	/	±0.3A	±5%
Read_PIN(97h)	/	±20W	±5%
Read_Vout(8Bh)	±3%	±3%	±3%
Read_Iout(8Ch)	/	±1.5A	±5%
Read_Pout(96h)	/	±15W	±5%
Read_Ambient Temperature(0-70°C) (8Eh)	±5°C		

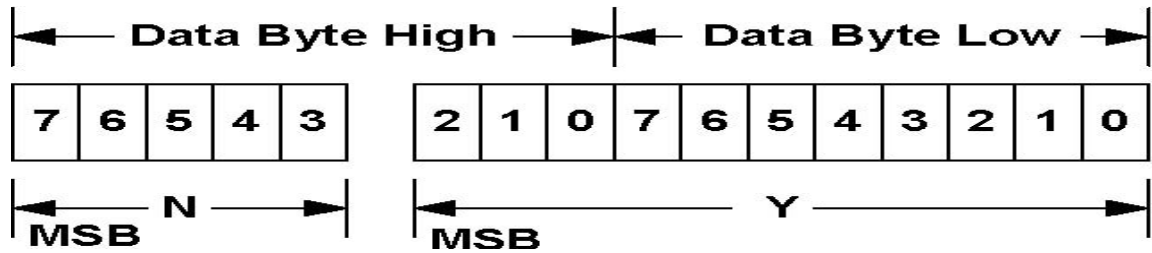
Note:

1. There is no accuracy requirement when PSU is in PS-OFF mode.

13.2 PMBus Specification

Linear Data Formats

The Linear Data Format is a two byte value with: An 11 bit, two's complement mantissa and A 5 bit, two's complement exponent (scaling factor). The format of the two data bytes is illustrated in below Figure.



The relation between Y, N and the “real world” value is: $X = Y \cdot 2^N$

Where, as described above:

X is the “real world” value being communicated

Y is an 11 bit, two’s complement integer;

N is a 5 bit, two’s complement integer.

Devices that use the linear format must accept and be able to process any value of N.

13.3 PMBUS Command Supported

Table31. STATUS_WORD Command

Byte	Bit No.	Status Bit Name	Meaning	Support
Low	7	BUSY	A fault was declared because the device was busy and unable to respond.	No
	6	OFF	This bit is asserted if the unit is not providing power to the output, regardless of the reason, including simply not being enabled.	Yes
	5	VOUT_OV	An output over voltage fault has occurred.	Yes
	4	IOUT_OC	An output over current fault has occurred.	Yes
	3	VIN_UV	An input under voltage fault has occurred.	Yes
	2	TEMPERATURE	A temperature fault or warning has occurred.	Yes
	1	CML	A communications, memory or logic fault has occurred.	No
	0	NONE OF THE ABOVE	A fault or warning not listed in bits [7:1] of this byte has occurred.	No
High	7	VOUT	An output voltage fault or warning has occurred.	Yes
	6	IOUT/POUT	An output current or output power fault or warning has occurred.	Yes



	5	INPUT	An input voltage, input current, or input power fault or warning has occurred.	Yes
	4	MFR	A manufacturer specific fault or warning has occurred.	No
	3	POWER_GOOD#	The POWER_GOOD signal, if present, is negated.	Yes
	2	FANS	A fan or airflow fault or warning has occurred.	Yes
	1	OTHER	A bit in STATUS_OTHER is set.	No
	0	UNKNOWN	A fault type not given in bits [15:1] of the STATUS_WORD has been detected.	No

Table32. STATUS_VOUT Command

Bit	Meaning	Support
7	VOUT Over voltage Fault	Yes
6	VOUT Over voltage Warning	No
5	VOUT Under voltage Warning	No
4	VOUT Under voltage Fault	Yes
3	VOUT_MAX Warning (An attempt has been made to set the output voltage to value higher than allowed by the VOUT_MAX command)	No
2	TON_MAX_FAULT	No
1	TOFF_MAX Warning	No
0	VOUT Tracking Error	No

Table33. STATUS_IOUT Command

Bit	Meaning	Support
7	IOUT Over current Fault	Yes
6	IOUT Over current And Low Voltage Shutdown Fault	No
5	IOUT Over current Warning	Yes
4	IOUT Undercurrent Fault	No
3	Current Share Fault	No
2	Power Limiting	No
1	POUT Overpower Fault	No
0	POUT Overpower Warning	No

Table34. STATUS_INPUT Command

Bit	Meaning	Support
7	VIN Over voltage Fault	Yes
6	VIN Over voltage Warning	No
5	VIN Under voltage Warning	No
4	VIN Under voltage Fault	Yes
3	Unit Off For Insufficient Input Voltage	No
2	IIN Over current Fault	No
1	IIN Over current Warning	No
0	PIN Overpower Warning	No

Table35. STATUS_TEMPERATURE Command

Bit	Meaning	Support
7	Over temperature Fault	Yes
6	Over temperature Warning	Yes
5	Under temperature Warnings	No
4	Under temperature Fault	No
3	Reserved	No
2	Reserved	No
1	Reserved	No
0	Reserved	No

Table36. STATUS_FAN_1_2 Command

Bit	Meaning	Support
7	Fan 1 Fault	Yes
6	Fan 2 Fault	No
5	Fan 1 Warning	Yes
4	Fan 2 Warning	No
3	Fan 1 Speed Overridden	No
2	Fan 2 Speed Overridden	No
1	Airflow Fault	No
0	Airflow Warning	No

**Table37. STATUS_OTHER Command**

Bit	Meaning	Support
7	Reserved	No
6	Reserved	No
5	Input A Fuse Or Circuit Breaker Fault	No
4	Input B Fuse Or Circuit Breaker Fault	No
3	Input A OR-ing Device Fault	No
2	Input B OR-ing Device Fault	No
1	Output OR-ing Device Fault	No
0	Reserved	No

Table38. Supported Command Summary

CMD Code	Name	Type	Bytes	Remark
03h	CLEAR_FAULTS	Send Byte	0	
19h	CAPABILITY	Read Byte	1	
1Ah	QUERY	Block Read	1	
20h	VOUT_MODE	Read Byte	1	
40h	VOUT_OV_FAULT_LIMIT	Read Word	2	
44h	VOUT_UV_FAULT_LIMIT	Read Word	2	
46h	IOUT_OC_FAULT_LIMIT	Read Word	2	
4Ah	IOUT_OC_WARN_LIMIT	Read Word	2	
4Fh	OT_FAULT_LIMIT	Read Word	2	
51h	OT_WARN_LIMIT	Read Word	2	
55h	VIN_OV_FAULT_LIMIT	Read Word	2	
57h	VIN_OV_WARN_LIMIT	Read Word	2	
58h	VIN_UV_WARN_LIMIT	Read Word	2	
59h	VIN_UV_FAULT_LIMIT	Read Word	2	
78h	STATUS_BYTE	Read Byte	1	
79h	STATUS_WORD	Read Word	2	
7Ah	STATUS_VOUT	Read Byte	1	
7Bh	STATUS_IOUT	Read Byte	1	



7Ch	STATUS_INPUT	Read Byte	1	
7Dh	STATUS_TEMPERATURE	Read Byte	1	
7Fh	STATUS_OTHER	Read Byte	1	
80h	READ_VIN_TYPE	Read Byte	1	00:NO AC; 01:AC; 02:HVDC
81h	STATUS_FANS_1_2	Read Byte	1	
84h	READ_Vsb_OUT(Mfr. Defined)	Read Word	2	
85h	READ_Isb_OUT(Mfr. Defined)	Read Word	2	
86h	READ_EIN	Block Read	6	
87h	READ_EOUT	Block Read	6	
88h	READ_VIN	Read Word	2	
89h	READ_IIN	Read Word	2	
8Bh	READ_VOUT	Read Word	2	
8Ch	READ_IOUT	Read Word	2	
8Dh	READ_TEMPERATURE_1	Read Word	2	
8Eh	READ_TEMPERATURE_2	Read Word	2	
8Fh	READ_TEMPERATURE_3	Read Word	2	
90h	READ_FAN_SPEED_1	Read Word	2	Rpm value
96h	READ_POUT	Read Word	2	
97h	READ_PIN	Read Word	2	
98h	PMBUS_REVISION	Read Byte	1	V1.2
99h	MFR_ID	Read Block	14	See MFR Data table
9Ah	MFR_MODEL	Read Block	14	See MFR Data table
9Bh	MFR_REVISION	Read Block	6	Updata
A0h	MFR_VIN_MIN	Read Word	2	See MFR Data table
A1h	MFR_VIN_MAX	Read Word	2	See MFR Data table
A4h	MFR_VOUT_MIN	Read Word	2	See MFR Data table
A5h	MFR_VOUT_MAX	Read Word	2	See MFR Data table
A6h	MFR_IOUT_MAX	Read Word	2	See MFR Data table



A7h	MFR_POUT_MAX	Read Word	2	See MFR Data table
A8h	MFR_TAMBIENT_MAX	Read Word	2	See MFR Data table
A9h	MFR_TAMBIENT_MIN	Read Word	2	See MFR Data table
D0h	SMART_ON_CONFIG	Write Byte Read Byte	1	00h Standard Redundancy 01h Smart On Active 02h Smart Standby 03h Smart Standby 04h Smart Standby

Table39. MFR Data

CMD Code	Name	Content
99h	MFR_ID	ASPOWER
9Ah	MFR_MODEL	U1A-D10800-DRB
A0h	MFR_VIN_MIN	90
A1h	MFR_VIN_MAX	264
A4h	MFR_VOUT_MIN	11.4
A5h	MFR_VOUT_MAX	12.6
A6h	MFR_IOUT_MAX	65
A7h	MFR_POUT_MAX	800
A8h	MFR_TAMBIENT_MAX	50
A9h	MFR_TAMBIENT_MIN	0

Appendix



ASPOWER

深圳欧陆通电子股份有限公司

Mfg Date & Time: 2017/12/24 4:14:00 PM					
U1A-D10800-DRB FRU MEMORY MAP XXF					
ITEM	ADDRESS	BYTE VALUE (DEC)	BYTE VALUE (hex)	DESCRIPTION	BLOCK TITLE
1	0000H	1	01	FORMAT VERSION NUMBER	COMMON HEADER
2	0001H	1	01	INTERNAL USE AREA OFFSET	
3	0002H	0	00	CHASSIS INFO AREA OFFSET	
4	0003H	0	00	BOARD AREA OFFSET	
5	0004H	3	03	PRODUCT INFO AREA OFFSET	
6	0005H	11	0B	MULTI RECORD AREA OFFSET	
7	0006H	0	00	PAD (ALWAYS ZERO)	
8	0007H	0	00	PAD (ALWAYS ZERO)	
1	0008H	1	01	PAD (ALWAYS ZERO)	INTERNAL USE AREA
2	0009H	0	00	PAD (ALWAYS ZERO)	
3	000AH	0	00	PAD (ALWAYS ZERO)	
4	000BH	0	00	PAD (ALWAYS ZERO)	
5	000CH	0	00	PAD (ALWAYS ZERO)	
6	000DH	0	00	PAD (ALWAYS ZERO)	
7	000EH	0	00	PAD (ALWAYS ZERO)	
8	000FH	0	00	PAD (ALWAYS ZERO)	
9	0010H	0	00	PAD (ALWAYS ZERO)	
10	0011H	0	00	PAD (ALWAYS ZERO)	
11	0012H	0	00	PAD (ALWAYS ZERO)	
12	0013H	0	00	PAD (ALWAYS ZERO)	
13	0014H	0	00	PAD (ALWAYS ZERO)	
14	0015H	0	00	PAD (ALWAYS ZERO)	
15	0016H	0	00	PAD (ALWAYS ZERO)	
16	0017H	0	00	PAD (ALWAYS ZERO)	
17	0018H	1	01	PRODUCT AREA FORMAT VERSION	PRODUCT INFORMATION AREA
18	0019H	8	08	PRODUCT AREA LENGTH (#BYTES / 8)	
19	001AH	25	19	LANGUAGE (ENGLISH)	
20	001BH	199	C7	PRODUCT MANUFACTURER NAME LENGTH / byte	
21	001CH	65	41	A	
22	001DH	83	53	S	
23	001EH	80	50	P	
24	001FH	79	4F	O	
25	0020H	87	57	W	
26	0021H	69	45	E	
27	0022H	82	52	R	
28	0023H	207	CF	PRODUCT NAME LENGTH	
29	0024H	85	55	U	
30	0025H	49	31	1	
31	0026H	65	41	A	
32	0027H	45	2D	-	
33	0028H	68	44	D	
34	0029H	49	31	1	
35	002AH	48	30	0	
36	002BH	56	38	8	
37	002CH	48	30	0	
38	002DH	48	30	0	
39	002EH	45	2D	-	
40	002FH	68	44	D	
41	0030H	82	52	R	
42	0031H	66	42	B	
43	0032H	32	20		
44	0033H	197	C5	CUSTOMER PRODUCT SERIAL NO. LENGTH	Part NO.
45	0034H	32	20		
46	0035H	32	20		
47	0036H	32	20		
48	0037H	32	20		
49	0038H	32	20		
50	0039H	195	C3	BOARD VERSION type/length	
51	003AH	49	31	1	To be updated
52	003BH	46	2E		To be updated
53	003CH	48	30	0	To be updated
54	003DH	214	D6	PRODUCT SERIAL NO. LENGTH	
55	003EH	85	55	U	To be updated
56	003FH	49	31	1	To be updated
57	0040H	65	41	A	To be updated
58	0041H	68	44	D	To be updated



59	0042H	49	31	1		To be updated
60	0043H	48	30	0		To be updated
61	0044H	56	38	8		To be updated
62	0045H	48	30	0		To be updated
63	0046H	48	30	0		To be updated
64	0047H	82	52	R		To be updated
65	0048H	49	31	1		To be updated
66	0049H	73	49	I		To be updated
67	004AH	80	50	P		To be updated
68	004BH	67	43	C		To be updated
69	004CH	49	31	1		To be updated
70	004DH	74	4A	J		To be updated
71	004EH	65	41	A		To be updated
72	004FH	75	4B	K		To be updated
1	0050H	48	30	0		To be updated
2	0051H	52	34	4		To be updated
3	0052H	50	32	2		To be updated
4	0053H	51	33	3		To be updated
5	0054H	192	C0		ASSET TAG type/length byte	
6	0055H	192	C0		FRU File ID type/length byte	
7	0056H	193	C1		NO MORE FIELDS MARKER	
8	0057H	208	C2		RECORD TYPE ID 0X00 = POWER SUPPLY INFORMATION	To be updated
9	0058H	0	00		RECORD TYPE ID 0X00 = POWER SUPPLY INFORMATION	MULTIRECORD
10	0059H	2	02		7: 7 END OF LIST , 6: 4 =000B , 3: 0 RECORD FORMAT VERSION = 2	HEADER
11	005AH	24	18		RECORD LENGTH OF MULTIRECORD	
12	005BH	218	DA		RECORD CHECKSUM	
13	005CH	13	0C		HEADER CHECKSUM	
14	005DH	32	20		15-12: RESERVED , WRITE AS 0000B	800W
15	005EH	3	03		11-0: OVERALL CAPACITY (WATTS)	800W
16	005FH	32	20		PEAK VALUE	800W
17	0060H	3	03		LSB FIRST	800W
18	0061H	45	2D		INRUSH CURRENT FFH IF NOT SPECIFIED	45A
19	0062H	5	05		SET TO 0 IF NO INRUSH CURRENT SPECIFIED	5mS
20	0063H	16	10		LOW END INPUT VOLTAGE RANGE 1 100V = 2328H	100V
21	0064H	39	27			100V
22	0065H	156	9C		HIGH END INPUT VOLTAGE RANGE 1 140 = 36B0H	127V
23	0066H	49	31			127V
24	0067H	32	20		LOW END INPUT VOLTAGE RANGE 2 180V = 4650H	200V
25	0068H	78	4E			200V
26	0069H	192	C0		HIGH END INPUT VOLTAGE RANGE 2 264 = 6720H	240V
27	006AH	93	5D			240V
28	006BH	47	2F		LOW END INPUT FREQUENCY RANGE 47HZ = 2FH	47Hz
29	006CH	63	3F		HIGH END INPUT FREQUENCY RANGE 63HZ = 3FH	63Hz
1	006DH	12	0C		A / C DROPOUT TOLERANCE IN mS 12mS = 0CH	12mS
2	006EH	26	1A		7.5: RESERVED , WRITE AS 000B 4: TACHOMETER PULSES PER ROTATION / PREDICTIVE FALL POLARITY YES = 1 { FAIL = 1 , PASS = 0 } 3: HOT SWAP / REDUNDANCY SUPPORT YES = 1 2: AUTOSWITCH YES = 1 1: POWER FACTOR CORRECTION YES = 1 0: PREDICTIVE FALL SUPPLY YES = 1	
3	006FH	32	20		PEAK WATTAGE 15-12: HOLD UP TIME IN SECONDS 1S = 1H	800W
4	0070H	195	C3		11-0 PEAK CAPACITY (WATTS) (LSB FIRST) 575W = 01C2H	12S
5	0071H	0	00		COMBINED WATTAGE 7-4: VOLTAGE 1 , 3-0: VOLTAGE 2 = 00H	
6	0072H	32	20		BYTE 2: 3 TOTAL COMBINED WATTAGE (LSB FIRST) W = 0000H	800W
7	0073H	3	03			800W
8	0074H	133	85		PREDICTIVE FAIL TACHOMETER LOWER THRESHOLD (RPM / 60) 2000/60 -> 21h	
9	0075H	1	01		RECORD TYPE ID 0X01 = DC OUTPUT Record	MULTIRECORD
10	0076H	2	02		7: 7 END OF LIST , 6: 4 =000B , 3: 0 RECORD FORMAT VERSION = 2	HEADER
11	0077H	13	0D		RECORD LENGTH OF MULTIRECORD	
12	0078H	118	8B		RECORD CHECKSUM	
13	0079H	89	6B		HEADER CHECKSUM	
14	007AH	1	01		+12V 7: STANDBY = 0 , 6-4: RESERVED 000B , 3-0: OUTPUT NUMBER = 0001B	+12V
15	007BH	176	B0		NOMINAL VOLTAGE (10mV) 1200 = 04B0H	12.0V
16	007CH	4	04			12.0V
17	007DH	116	74		MAXIMUM NEGATIVE VOLTAGE DEVIATION (10mV)	11.4V
18	007EH	4	04			11.4V
1	007FH	236	EC		MAXIMUM POSITIVE VOLTAGE DEVIATION (10mV)	12.6V
2	0080H	4	04			12.6V
3	0081H	120	78		RIPPLE AND NOISE PK-PK 10Hz TO 20MHz (mV) 120mV = 0078H	120mV



4	0082H	0	00		120mV
5	0083H	232	E8	MINIMUM CURRENT DRAW(mA)	1.0A
6	0084H	3	03		1.0A
7	0085H	232	E8	MAXIMUM CURRENT DRAW(mA)	65A
8	0086H	253	FD		65A
9	0087H	1	01	RECORD TYPE ID 0X01 = DC OUTPUT Record	MULTIRECORD
10	0088H	130	82	7: 7 END OF LIST , 6: 4 =000B , 3: 0 RECORD FORMAT VERSION = 2	HEADER
11	0089H	13	0D	RECORD LENGTH OF MULTIRECORD	
12	008AH	14	4A	RECORD CHECKSUM	
13	008BH	16	26	HEADER CHECKSUM	
14	008CH	130	82	+12VSB 7: STANDBY = 0 , 6:4 : RESERVED 000B , 3:0 : OUTPUT NUMBER = 0010B	+12VSB
15	008DH	176	B0	NOMINAL VOLTAGE(10mV)	12V
16	008EH	4	04		12V
17	008FH	116	74	MAXIMUM NEGATIVE VOLTAGE DEVIATION(10mV)	11.4V
18	0090H	4	04		11.4V
1	0091H	236	EC	MAXIMUM POSITIVE VOLTAGE DEVIATION(10mV)	12.6V
2	0092H	4	04		12.6V
3	0093H	120	78	RIPPLE AND NOISE PK - PK 10Hz TO 20MHz(mV) 50mV = 0032H	120mV
4	0094H	0	00		120mV
5	0095H	100	64	MINIMUM CURRENT DRAW(mA) 0mA = 0000H	0.1A
6	0096H	0	00		0.1A
7	0097H	52	34	MAXIMUM CURRENT DRAW(mA)	2.1A
8	0098H	08	08		2.1A
9	0099H	0	00	Unused Area	
10	009AH	0	00	Unused Area	
11	009BH	0	00	Unused Area	
12	009CH	0	00	Unused Area	
13	009DH	0	00	Unused Area	
14	009EH	0	00	Unused Area	
15	009FH	0	00	Unused Area	
16	00A0H	0	00	Unused Area	
17	00A1H	0	00	Unused Area	
18	00A2H	0	00	Unused Area	
19	00A3H	0	00	Unused Area	
20	00A4H	0	00	Unused Area	
21	00A5H	0	00	Unused Area	
22	00A6H	0	00	Unused Area	
23	00A7H	0	00	Unused Area	
24	00A8H	0	00	Unused Area	
25	00A9H	0	00	Unused Area	
26	00AAH	0	00	Unused Area	
27	00ABH	0	00	Unused Area	
28	00ACH	0	00	Unused Area	
29	00ADH	0	00	Unused Area	
30	00AEH	0	00	Unused Area	
31	00AFH	0	00	Unused Area	
32	00B0H	0	00	Unused Area	
33	00B1H	0	00	Unused Area	
34	00B2H	0	00	Unused Area	
35	00B3H	0	00	Unused Area	
36	00B4H	0	00	Unused Area	
37	00B5H	0	00	Unused Area	
38	00B6H	0	00	Unused Area	
39	00B7H	0	00	Unused Area	
40	00B8H	0	00	Unused Area	
41	00B9H	0	00	Unused Area	
42	00BAH	0	00	Unused Area	
43	00BBH	0	00	Unused Area	
44	00BCH	0	00	Unused Area	
45	00BDH	0	00	Unused Area	
46	00BEH	0	00	Unused Area	
47	00BFH	0	00	Unused Area	
48	00C0H	0	00	Unused Area	
49	00C1H	0	00	Unused Area	
50	00C2H	0	00	Unused Area	
51	00C3H	0	00	Unused Area	
52	00C4H	0	00	Unused Area	
53	00C5H	0	00	Unused Area	
54	00C6H	0	00	Unused Area	
55	00C7H	0	00	Unused Area	



56	00C8H	0	00	Unused Area	
57	00C9H	0	00	Unused Area	
58	00CAH	0	00	Unused Area	
59	00CBH	0	00	Unused Area	
60	00CCH	0	00	Unused Area	
61	00CDH	0	00	Unused Area	
62	00CEH	0	00	Unused Area	
63	00CFH	0	00	Unused Area	
64	00D0H	0	00	Unused Area	
65	00D1H	0	00	Unused Area	
66	00D2H	0	00	Unused Area	
67	00D3H	0	00	Unused Area	
68	00D4H	0	00	Unused Area	
69	00D5H	0	00	Unused Area	
70	00D6H	0	00	Unused Area	
71	00D7H	0	00	Unused Area	
72	00D8H	0	00	Unused Area	
73	00D9H	0	00	Unused Area	
74	00DAH	0	00	Unused Area	
75	00DBH	0	00	Unused Area	
76	00DCH	0	00	Unused Area	
77	00DDH	0	00	Unused Area	
78	00DEH	0	00	Unused Area	
79	00DFH	0	00	Unused Area	
80	00E0H	0	00	Unused Area	
81	00E1H	0	00	Unused Area	
82	00E2H	0	00	Unused Area	
83	00E3H	0	00	Unused Area	
84	00E4H	0	00	Unused Area	
85	00E5H	0	00	Unused Area	
86	00E6H	0	00	Unused Area	
87	00E7H	0	00	Unused Area	
88	00E8H	0	00	Unused Area	
89	00E9H	0	00	Unused Area	
90	00EAH	0	00	Unused Area	
91	00EBH	0	00	Unused Area	
92	00ECH	0	00	Unused Area	
93	00EDH	0	00	Unused Area	
94	00EEH	0	00	Unused Area	
95	00EFH	0	00	Unused Area	
96	00F0H	0	00	Unused Area	
97	00F1H	0	00	Unused Area	
98	00F2H	0	00	Unused Area	
99	00F3H	0	00	Unused Area	
100	00F4H	0	00	Unused Area	
101	00F5H	0	00	Unused Area	
102	00F6H	0	00	Unused Area	
103	00F7H	0	00	Unused Area	
104	00F8H	0	00	Unused Area	
105	00F9H	0	00	Unused Area	
106	00FAH	0	00	Unused Area	
107	00FBH	0	00	Unused Area	
108	00FCH	0	00	Unused Area	
109	00FDH	0	00	Unused Area	
110	00FEH	0	00	Unused Area	
111	00FFH	0	00	Unused Area	



ASPOWER

深圳欧陆通电子股份有限公司

FRU DATA FOLLOW WITH SPEC LABEL, SPEC LABEL SHOULD BE CONFIRMED BY M.E.

Table showing HEX Information:

Rev: XXF

Addr	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0000	01	01	00	00	03	0B	00	F0	01	00	00	00	00	00	00	00
0010	00	00	00	00	00	00	00	00	01	08	19	C7	41	53	50	4F
0020	57	45	52	CF	55	31	41	2D	44	31	30	38	30	30	2D	44
0030	52	42	20	C5	20	20	20	20	20	C3	31	2E	30	D6	55	31
0040	41	44	31	30	38	30	30	52	31	49	50	43	31	4A	41	4B
0050	30	34	32	33	C0	C0	C1	00	00	02	18	DA	0C	20	03	20
0060	03	2D	05	10	27	9C	31	20	4E	C0	5D	2F	3F	0C	1A	20
0070	C3	00	20	03	85	01	02	0D	8B	8B	01	B0	04	74	04	EC
0080	04	78	00	E8	03	E8	FD	01	82	0D	4A	26	82	B0	04	74
0090	04	EC	04	78	00	64	00	34	08	00	00	00	00	00	00	00
00A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00C0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00D0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00E0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

CHECK LIST

All data written to EEPROM should be ASCII code in hexadecimal format

Note: All of the Check Sum are Calculated by Zero Check Sum

NO.	Item	Address	Byte	Description	Value
1	Checksum1	07H	1	100H - (Low Byte Sum(00H-06H))	F0
2	Checksum2	57H	1	100H - (Low Byte Sum(18H-56H))	Updated
3	Checksum3	5BH	1	100H - (Low Byte Sum(5DH-74H))	DA
4	Checksum4	5CH	1	100H - (Low Byte Sum(58H-5BH))	0C
5	Checksum6	78H	1	100H - (Low Byte Sum(7AH-86H))	9B
6	Checksum7	79H	1	100H - (Low Byte Sum(75H-78H))	55
7	Checksum8	8AH	1	100H - (Low Byte Sum(8CH-98H))	4A
8	Checksum9	8BH	1	100H - (Low Byte Sum(87H-8AH))	26
9	Manufacturer Name	1CH-22H	7	Use the ASCII Code	"ASPOWER"
10	Product Name	24H-32H	15	Use the ASCII Code	"U1A-D10800-DRB"
11	CUSTOMER PRODUCT NO.	34H-38H	5	Use the ASCII Code	
12	Product Version NO	3AH-3CH	3	Use the ASCII Code*(the value must to accord with #1)	Updated
13	Product Serial No.	3EH-53H	22	Use the ASCII Code*(the value must to accord with #2)	Updated
14	Unused Area	99H-FFH			00