

BP-206VH-P2E2

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 1150.471453 ppm MTBF: 869,209 Hours
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Issue date	Approval	Test Engineer
2013/07/30	Tom Lin	Anderson Lin

Reliability Prediction (MTBF)

I . Model Name: BP-206VH-P2E2

II . Prediction Date: July. 30, 2013

III . Prediction Site: AAEON Q.E. Dept.

IV . Predicted by: Anderson Lin

V . Equipment: Windchill Quality Solutions 10.1

VI. Simulation Environment:

- Temperature: 30 degrees C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The Failure rate multiplier is 1000000000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:

BP-206VH-P2E2 (BP-206VH-P2E2-A10):

- Failure Rate: 1150.471453 ppm
- MTBF: 869,209 Hours

**Reliability Prediction
Summary**

File Name: BP-206VH-P2E2.rfp
System: System
Ref Des:
Description:

Failure Rate: 1150.471453
MTBF (hrs): 869,209
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
BP-206VH-P2E2	System		1	1150.471453	869,209

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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1214309006	Inductor	CH1,CH2, CH3,CH4	4.944252	4	22.772366
11C9510490	Capacitor	C18,C19,C 20,C28, C29,C30,C 31,C32, C33,C36,C 37,C5,C55 C56,C57,C 58,C59,C6 C60,C61,C 62,C63, C64,C65,C 66,C67, C68,C69,C 7,C70,C71 C72,C73,C 74,C75, C76,C77,C 78,C79,C8 C80,C81,C 82,C83, C84,C85,C 86,C87, C88,C89,C 9	4.744484	51	252.481384
11A4422081	Capacitor	C11,C12	4.744484	2	11.621225
11E1522680	Capacitor	C39	4.744484	1	6.263191
1122501780	Capacitor	C40,C41,C 42,C43, C44,C45,C 46,C47, C48,C49	4.744484	10	52.099943
11C1547890	Capacitor	C51,C53	4.744484	2	11.621225
11E9501090	Capacitor	C52,C54	4.744484	2	11.621225
1300414848	Semiconductor	D1,D2,D3, D4	7.793411	4	37.052017
1212308054	Inductor	FB1,FB2	4.944252	2	12.019077
1304101340	Semiconductor	LED1,LED 3,LED4, LED5,LED 6	7.793411	5	45.526910
1310390413	Semiconductor	Q1	22.463360	1	31.602965
1050504724	Resistor	R1,R13,R1 6,R17,R18 R3,R36,R4 ,R40,R5	2.547039	10	28.506324

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1050502224	Resistor	R11,R12,R14,R2,R51,R56	2.547039	6	17.675978
105A510009	Resistor	R15,R47,R6	2.547039	3	9.343982
105A700003	Resistor	R10,R9	2.547039	2	6.490186
105A500133	Resistor	R21,R25	2.547039	2	6.490186
1050547004	Resistor	R22,R24,R26	2.547039	3	9.343982
105A500139	Resistor	R27,R29	2.547039	2	6.490186
1050510034	Resistor	R35	2.547039	1	3.541821
1050547034	Resistor	R28,R31,R33	2.547039	3	9.343982
105A756039	Resistor	R32,R34	2.547039	2	6.490186
105A506829	Resistor	R37,R41	2.547039	2	6.490186
105A501539	Resistor	R38,R42	2.547039	2	6.490186
1050503324	Resistor	R39,R43	2.547039	2	6.490186
1050508224	Resistor	R48,R50	2.547039	2	6.490186
14S4081102	Integrated Circuit	U1	43.803003	1	85.184662
14S5912300	Integrated Circuit	U2	43.803003	1	85.184662
1655424022	Connection	ATX1	16.184835	1	28.022514
1655408023	Connection	ATX2	16.184835	1	28.022514
1655008020	Connection	CN1	16.184835	1	28.022514
1653002100	Connection	CN2,CN5,CN6	16.184835	3	68.890067
1655004018	Connection	CN3,CN4	16.184835	2	49.043282
1654282209	Connection	CPCIA,CP CIC	16.184835	2	49.043282
1654209820	Connection	CPCIB,CP CID	16.184835	2	49.043282
1189656196	Capacitor	C105,C107,C108,C110,C17,C21,C27,C3,C34,C35,C38,C50 C94,C96,C99	4.744484	15	76.868573
1181633111	Capacitor	C4	4.744484	1	6.263191
111161019B	Capacitor	C23,C25,C26	4.744484	3	16.835266
1112610102	Capacitor	C24	4.744484	1	6.263191
1181627194	Capacitor	C100,C111,C97	4.744484	3	16.835266
1654282208	Connection	PCIE1	16.184835	1	28.022514
1654232202	Connection	PCIE2	16.184835	1	28.022514
1654260212	Connection	PCI1,PCI2	16.184835	2	49.043282

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165300520X	Connection	USB1,USB 2	16.184835	2	49.043282
1653003100	Connection	CN9	16.184835	1	28.022514
1653300104	Connection	CN9(2-3)	16.184835	1	28.022514