



**Intel® Server Board S1200V3RP
Intel® Server System P4308RPLSHDR,
R1208RPMSHOR, R1208RPOSHOR,
R1304RPSSFBN, R1304RPOSHBN,
R1304RPMSHOR**

Calculated MTBF Estimates

**Revision 1.0
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Enterprise Platform & Services Division

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MTBF Estimates for Intel® Server Board -S1200V3RP

	MTBF	Ambient Air Temperature
	(hours)	(oC)
S1200V3RPS	386,228	40
S1200V3RPL	374,023	40
S1200V3RPO	377,841	40
S1200V3RPM	371,523	40

MTBF Estimates for R1208RPMSHOR

Subassembly (Server in 40C ambient air)	Server Model	
	S1208RPMSHOR	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPM board	371,523	2,692
Power Supply - 450W MiniERPS	967,300	1,034
Cooling Fan (1-fixed fans)	490,000	2,041
Cooling Fan (2-fixed fans)	77,680	12,873
Front Panel board	8,272,282	121
HS Backplane(1U,8x2.5")	3,384,479	295
Totals without motherboard =	61,100	16,364
Totals with motherboard =	52,400	19,056

New Fan G63402-xxx is a new Fan, two sources: NMB and Nidec
 NMB MTTF@40C:155,359 L10@40C=88,726
 Nidec MTTF@40C:204,866 L10@40C=108,357
 Here for system MTBF is using NMB for worst case

MTBF Estimates for R1208RPOSHOR

Subassembly (Server in 40C ambient air)	Server Model	
	R1208RPOSHOR	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPO board	377,841	2,647
Power Supply - 450W MiniERPS	967,300	1,034
Cooling Fan (1-fixed fans)	490,000	2,041
Cooling Fan (2-fixed fans)	77,680	12,873
HS Backplane board(8x2.5")	3,384,479	295
Front Panel board	8,272,282	121
Totals without motherboard =	61,100	16,364
Totals with motherboard =	52,600	19,011

New Fan G63402-xxx is a new Fan, two sources: NMB and Nidec

NMB MTTF@40C:155,359

L10@40C=88,726

Nidec MTTF@40C:204,866

L10@40C=108,357

Here for system MTBF is using NMB for worst case

MTBF Estimates for R1304RPOSHBN

Subassembly (Server in 40C ambient air)	Server Model	
	R1304RPOSHBN	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPO board	377,841	2,647
Power Supply - 350W NR	582,873	1,716
Cooling Fan (1-fixed fans)	490,000	2,041
Cooling Fan (2-fixed fans)	77,680	12,873
Front Panel board	8,272,282	121
HS Backplane(4x3.5")	935,180	1,069
Totals without motherboard =	56,100	17,820
Totals with motherboard =	48,800	20,467

! New Fan G63402-xxx is a new Fan, two sources: NMB and Nidec
NMB MTTF@40C:155,359 L10@40C=88,726
Nidec MTTF@40C:204,866 L10@40C=108,357
Here for system MTBF is using NMB for worst case

MTBF Estimates for R1304RPSSFBN

Subassembly (Server in 40C ambient air)	Server Model	
	R1304RPSSFBN	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPS board	386,228	2,589
Power Supply - 350W NR	582,873	1,716
Cooling Fan (1-fixed fans)	490,000	2,041
Cooling Fan (2-fixed fans)	77,680	12,873
Front Panel board	8,272,282	121
Totals without motherboard =	59,600	16,751
Totals with motherboard =	51,700	19,340

New Fan G63402-xxx is a new Fan, two sources: NMB and Nidec
 NMB MTTF@40C:155,359 L10@40C=88,726
 Nidec MTTF@40C:204,866 L10@40C=108,357
 Here for system MTBF is using NMB for worst case

MTBF Estimates for R1304RPM SHOR

Subassembly (Server in 40C ambient air)	Server Model	
	R1304RPM SHOR	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPM board	371,523	2,692
Power Supply - 450W MiniERPS	967,300	1,034
Cooling Fan (1-fixed fans)	490,000	2,041
Cooling Fan (2-fixed fans)	77,680	12,873
Front Panel board	8,272,282	121
HS Backplane(4x3.5")	935,180	1,069
Totals without motherboard =	58,300	17,138
Totals with motherboard =	50,400	19,830

New Fan G63402-xxx is a new Fan, two sources: NMB and Nidec

NMB MTTF@40C:155,359

L10@40C=88,726

Nidec MTTF@40C:204,866

L10@40C=108,357

Here for system MTBF is using NMB for worst case

MTBF Estimates for P4308RPLSHDR

Subassembly (Server in 40C ambient air)	Server Model	
	P4308RPLSHDR	
	MTBF	FIT
	(hours)	(flrs/10 ⁹ hrs)
S1200V3RPL board	374,023	2,674
Power Supply - 460W CRPS	1,186,122	843
Cooling Fan (fixed fans)	403,572	2,478
Backplane board(8X3.5" HSBP)	712,161	1,404
Front Panel board	8,272,282	121
PDB	1,726,969	579
Totals without motherboard =	184,300	5,425
Totals with motherboard =	123,400	8,099