

PCN: V14-016-E47540-MF

Product Change Notice

Issue Date: 10 December, 2014

Change Type:

New transceiver module design

Parts Affected:

10G Ethernet, 9.8G CPRI, SFP+ LR, 1310nm Single mode

Current Avago Part Number	New Avago Part Number	
AFCT-701ASDZ	AFCT-739ASMZ	
AFCT-701SDDZ	AFCT-739DMZ	
AFCT-701SDZ	AFCT-739SMZ	
AFCT-701ASDZ-AR1	AFCT-739ASMZ-AR1	
AFCT-701SDZ-MY1	AFCT-739SMZ-MY1	
AFCT-709ASMZ	AFCT-739ASMZ	
AFCT-709DMZ	AFCT-739DMZ	
AFCT-709SMZ	AFCT-739SMZ	
AFCT-709SMZ-SN1	AFCT-739SMZ-SN1	
AFCT-709JAMZ	AFCT-739JAMZ	

Description and Extent of Change:

New TOSA design with DFB laser from Avago's Breinigsville, PA fab location.

Reason for Change:

New TOSA qualification.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

There is no change to form, fit, function, quality and reliability of the products. The device specification and manufacturing process will be same as the current products.

Effective Date of Change:

Product shipments using this change will begin on or after March 16, 2015 (WW1512), or earlier with customer approval. Timing of shipment will depend on customer demand and inventory on-hand of current products.

Support of Current Materials:

Avago plans to obsolete the listed current part numbers. Customers will have until March 30th, 2015 to place the last-time orders. Last-time ship date from Avago will be June 29th, 2015.

Recommended Actions to be Taken by Customer:

1. Module-level qualification is recommended. Avago will make samples available to customers in December '14 (customization lead-time not included) and will begin shipment of new 10G LR SFP+ products upon successful customer qualification starting March 16, 2015. Please return any response as soon as possible, but not to exceed 90 days.

2. Sample requests must specify the PCN # stated above and shall be placed by your Avago Technologies Field Sales Representative through the Avago Technologies FOMFGS ordering system.

Qualification Data:

Qualification with 2,000-hour data of the following tests has been completed:

Leg	Test	Reference	Stress Condition	S/S	Expected Result
1	High Temperature Operating Life (HTOL)	Section 5.18 (GR-468-CORE)	Ta = 85°C, Vcc=3.3V Qual Release: 2000Hrs	11	0 Failures @ 2000hrs
2	High Temperature Storage (HTS)	Section 5.18 (GR-468-CORE)	Ta = 100°C Qual Release: 2000Hrs	11	0 Failures @ 2000hrs
3	Biased Damp Heat (BDH)	MIL-STD-202 Method 103	Ta = 85°C, RH = 85%, Vcc=3.3V Qual Release: 1000Hrs	11	0 Failures @ 1000hrs
4	Un-Biased Damp Heat (uBDH)	MIL-STD-202 Method 103	Ta = 85°C, RH = 85% Qual Release: 1000Hrs	11	0 Failures @ 1000hrs
5	Biased Cyclic Moisture Resistance (BCMR)	MIL-STD-883 Method 1004	Ta = -10°C to +65°C, Biased, Power On/Off @30min, 95%RH Qual Release: 20 Cyc	11	0 Failure @ 20 Cyc
6	Temperature Cycling (TMCL)	MIL-STD-883 Method 1010	Ta = -40°C/100°C 15 min. dwell @ Cold & Hot Temp 5 min. Transfer Qual Release: 500 Cyc	11	0 Failure @ 500 Cyc
7	Low Temperature Storage (LTS)	GR-468-CORE	Ta= -40°C Qual Release: 72Hrs	11	0 Failure @ 72hrs
8	Thermal Shock (TS)	MIL-STD-883 Method 1011.9	Ta= -40°C/100°C 5 min dwell @ Cold & Hot Temp 10 s transfer Qual Release: 20 Cyc	11	0 Failure @ 20 Cyc
9a	Mechanical Shock (MS)	MIL-STD-883 Method 2002B	1500g, 0.5ms, 5 shock/axis, 6 axis	11	0 Failure
9b	Mechanical Vibration (MV)	MIL-STD-883 Method 2007	20g, 20 to 2000Hz, 3 axis, 4min/cycle, 4cycle/axis	11	0 Failure
10		JESD22-A114-B	1KV (High Speed Pins)	6	0 Failure @ 1KV (High Speed Pin)
			2KV (Low Speed Pins)	U	0 Failure @ 2KV (Low Speed Pins)

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies' procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<u>http://www.avagotech.com/contact/</u>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.