

PCN: V13-011-E47540-M1

Product Change Notice

Change Type:

Issue Date: May 20, 2013

Minor

Part Affected:

QSFP+ 40G SR4 Transceivers with standard bail delatch.

| ent Avago part number | New Avago part number | | |
|-----------------------|---|--|--|
| R-79E4Z-D | AFBR-79EQDZ AFBR-79EQDZ No change | | |
| | R-79E4Z | | |

Description and Extent of Change:

Implement uniform housing delatching design across SR4/iSR4/eSR4 product family to accommodate both standard bail delatch and pull tab requirements



Top View



Reasons for Change:

Streamline build standards, supply chain, and improve assurance of supply.

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

There is no change to fit, function, quality or reliability of the product. There is no change in product's optical and/or electrical performance.

Effective Date of Change:

Product shipment with this change is planned for week starting August 26, 2013 (date code beginning 1335) or later. Avago plans to deplete existing inventory before commencing shipment of products with subject change.

Recommended Action to be Taken by Customer:

- 1) Contact local Avago Sales Representative, if samples are needed for evaluation.
- 2) When requesting samples, please include product change notification number listed at the top right. Note the part number AFBR-79EQDZ is also going through a Product Change Notification. Please reference PCN number if you are interested in getting samples.
- 3) The PCN will be implemented after 90 days, unless there is an active engagement with respect to the change.

Qualification Data:

Qualification vehicle: AFBR-79EIDZ

Results:

Table below summarizes the qualification test legs, test references, conditions, sample size and the test result. AFBR-79EIDZ is considered qualified based on the qualification result.

| Leg | Test | Reference | Stress Condition | Required S/S | 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 Failure @ 2000hrs |
| 3 | Biased Damp Heat (BDH) | MIL-STD-202 Method 103 | Ta = 85°C, RH = 85%, Vcc=3.3V Qual Release: 1000Hrs | 11 | 0 Failure @ 1000hrs |
| 4 | Un-Biased Damp Heat (uBDH) | MIL-STD-202 Method 103 | Ta = 85°C, RH = 85% Qual Release: 1000Hrs | 11 | 0 Failure @ 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 |

| Leg | Test | Reference | Stress Condition | Required S/S | Result |
|-----|------------------------------|------------------------------|---|-----------------|--------------------|
| 7 | 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 For Info Only: 500 Cyc | 11 | 0 Failure @ 20 Cyc |
| 8a | Mechanical Shock (MS) | MIL-STD-883 Method 2002B | 1500g, 0.5ms, 5 shock/axis, 6 axis | 11 | 0 Failure |
| 8b | Mechanical Vibration (MV) | MIL-STD-883 Method 2007 | 20g, 20 to 2000Hz, 3 axis, 4min/cycle, 4cycle/axis | 11 | 0 Failure |
| 9 | ESD – HBM | JESD22-A114-B | 1KV (High Speed Pins) 2KV (Low Speed Pins) | 6 | 0 Failure |
| 10a | Air Discharge | IEC 61000-4-2 | 15KV | 3 | 0 Failure @ 15KV |
| 10b | Contact Discharge | IEC 61000-4-2 | 8KV | 3 | 0 Failure @ 8KV |

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.