**PCN: V19-014-E47540-MG**

# Product Change /EOL NOTIFICATION

**Issue Date: Sept.18, 2019**

**Dear Customer,**

**Change Type:**
New transceiver module design

**Parts Affected:**
10G SFP+ SR, 850nm Multimode, 0 to +70°C, 0 to 85°C & -40 to 85°C.
10G Fibre Channel SFP+, 850nm Multimode, 0 to +70°C & 0 to 85°C
9.83G CPRI SFP+, 850nm Multimode, -40°C to 85°C

| Current FOIT Part Number | New FOIT Part Number |
|---|---|
| AFBR-709SMZ | AFBR-710SMZ |
| AFBR-709ASMZ | AFBR-710ASMZ |
| AFBR-709ISMZ | AFBR-710ISMZ |
| AFBR-709JAMZ | AFBR-710JAMZ |
| AFBR-709DMZ | AFBR-710DMZ |
| AFBR-709FMZx | AFBR-710FMZ |
| AFBR-709AFMZx | AFBR-710AFMZ |
| AFBR-708SMZ | AFBR-710USMZ |

**Reason for Change:**
In order to improve assurance of supply, two sources are qualified for the VCSEL. The new design also incorporates an all CMOS IC that includes TIA, Laser Driver (LD), & Microcontroller all in one compact package simplifying volume production and improving reliability.

In addition, manufacturing site will be in HiOptel/Venture which are also exisiting qualified CM for FOIT.

**Effect of Change on Fit, Form, Function, Quality, or Reliability:**
There is no change to form, fit and function, quality and reliability of products. The device specification and manufacturing process will be identical as the current products.

**Last time buy For Curent FOIT's PNs March 18, 2020**

**Last time Ship For Current FOIT's PNs Oct 18, 2020**

Sample for new FOIT's PNs will be available on October 30, 2019.
Product shipments using this change will begin on or after Nov. 18 , 2019 (WW1947). Timing of shipment will depend on customer demand and inventory on-hand of current products.

**Recommended Actions to be Taken by Customer:**
Approve this PCN as soon as possible. Samples are available for evaluation if needed. Please contact local sales team to order samples.

**Qualification Data**

Table 1: Qualification Test Summary

| Leg | Test | Reference | *Condition* | Sample Size | Test Points | Result (Fail/Pass) |
|---|---|---|---|---|---|---|
| 1 | High Temperature Operating Life | Section 5.18 (GR-468-CORE) | Tcase = 85°C, Vcc=3.3V, Release Point: 2000hrs | 11 | 168, 500, 1000 & 2000 hrs | Oct'19 |
| 2 | Biased Damp Heat | MIL-STD-202 Method 103 | Ta = 85°C, RH = 85%, Vcc=3.3V, Release Point: 1000hrs, | 11 | 168, 500, 1000 hrs | Oct'19 |
| 3 | Un-Biased Damp Heat | MIL-STD-202 Method 103 | Tcase=+85°C, RH = 85% Qual Release: 1000Hrs | 11 | 168, 500, 1000 hrs | Oct'19 |
| 4 | Temperature Cycling | MIL-STD-883 Method 1010 | Ta = -40°C to +85°C, Release Point: 500 cyc, | 11 | 0, 500 cyc | Sep'19 |
| 5a | Mechanical Shock (MS) | MIL-STD-883 Method 2002B | 1500g, 0.5ms, 5shock/axis, 6axis | 11 | Post Shock test | Sep'19 |
| 5b | Mechanical Vibration (MV) | MIL-STD-883 Method 2007 | 20g, 20 to 2000Hz, 3axis, 4min/cycle, 4cycle/axis | | Post Vibration | Sep'19 |
| 6 | Biased Cyclic Moisture Resistance | MIL-STD-883 Method 1004 | Ta = -10oC to +65oC, biased (Vcc= 3.3V) power On/Off @30min, 95%RH Released point: 20 cyc | 11 | 0, 20 cyc | Sep'19 |
| 7 | Dust Test | GR-326-CORE | | 10 | Post Dust Test | Oct'19 |
| 8 | ESD – HBM | JS-001-2017 | 1KV (High Speed Pins) 2KV (Low Speed Pins) | 6 | Post ESD | Sep'19 |
| 9 | Good Device Analysis | FA Technique (X-ray, X-section etc) | NA | 2 | NA | Oct'19 |

These changes have been reviewed and approved by FIT engineers and managers per FIT procedure.

Please contact your Broadcom Limited field sales engineer for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.