

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	44	Post Shock test	Sep'19
5b	Mechanical Vibration (MV)	MIL-STD-883 Method 2007	20g, 20 to 2000Hz, 3axis, 4min/cycle, 4cycle/axis	11	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.