

## PCN: V19-014-E47540-MG Rev 2

# Product Change /EOL NOTIFICATION

Revised Issue Date: May 18, 2020

#### Change Type:

New transceiver module design

#### Parts Affected:

10G SFP+ SR, 850nm Multimode, 0 to  $+70^{\circ}$ C, 0 to  $85^{\circ}$ C & -40 to  $85^{\circ}$ C. 10G Fibre Channel SFP+, 850nm Multimode, 0 to  $+70^{\circ}$ C & 0 to  $85^{\circ}$ C 9.83G CPRI SFP+, 850nm Multimode, -40 °C to 85 °C

Current Broadcom Part Number	New Broadcom Part Number		
AFBR-709SMZ	AFBR-710SMZ		
AFBR-709ASMZ	AFBR-710ASMZ		
AFBR-709ISMZ	AFBR-710ISMZ		
AFBR-709JAMZ	AFBR-710ISMZ		
AFBR-709DMZ	AFBR-710DMZ		
AFBR-709FMZ	AFBR-710SMZ		
AFBR-709AFMZ	AFBR-710ASMZ		
AFBR-708SMZ	AFBR-710SMZ		

#### Reason for Change:

New module design with non BRCM designed IC (laser driver/limiting amplifier & TIA) and alternate VCSEL & PIN.

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

#### 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 Broadcom's PNs Sep 18, 2020

### Last time Ship For Current Broadcom's PNs Dec 18, 2020

Sample for new FOIT's PNs will be available on Jan 2020.

Product shipments using this change will begin on or after Feb, 2020. 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	Pass
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	Pass
3	Un-Biased Damp Heat	MIL-STD-202 Method 103	Tcase=+85°C, RH = 85% Qual Release: 1000Hrs	11	168, 500, 1000 hrs	Pass
4	Temperature Cycling	MIL-STD-883 Method 1010	Ta = -40°C to +85°C, Release Point: 500 cyc,	11	0, 500 cyc	Pass
5а	Mechanical Shock (MS)	MIL-STD-883 Method 2002B	1500g, 0.5ms, 5shock/axis, 6axis		Post Shock test	Pass
5b	Mechanical Vibration (MV)	MIL-STD-883 Method 2007	20g, 20 to 2000Hz, 3axis, 4min/cycle, 4cycle/axis	11	Post Vibration	Pass
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 сус	Pass
7	Dust Test	GR-326-CORE		10	Post Dust Test	Pass
8	ESD – HBM	JS-001-2017	1KV (High Speed Pins) 2KV (Low Speed Pins)	6	Post ESD	Pass
9	Good Device Analysis	FA Technique (X- ray, X-section etc)	NA	2	NA	Pass

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