

PCN-277114

Product Change Notice

Issue Date: 12-March-2024

Revised Date: 24-July-24

Change Description:

Introduction of new ROSA integrated receiver IC

Parts Affected:

AFBR-5803AQZ AFBR-5803ATQZ AFBR-5803ATZ AFBR-5803AZ AFBR-5803TZ AFBR-5803Z

Description and Extent of Change:

Introduction of a new receiver IC due to obsolescence of the fab process used for the current receiver IC. The new receiver IC is integrated in a 5-pin ROSA and integrates all receiver functions. As such, the change includes changing to a 5-pin ROSA from the currently used 4-pin ROSA, removal of the additional IC and its metal cover on the receiver side and related PCB changes.

Reasons for Change:

Assurance of supply.

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

There is no change of fit, form or reliability. There is a change in functionality in regards to the signal detect (SD) signal and receiver side power consumption.

Signal detect will get asserted and de-asserted as per the current specification based on the optical average input signal strength and its change, but not based on the signal quality anymore. Notes g., h. and i. under "Receiver Optical and Electrical Characteristics" and Figure 15 in the datasheet will be changed accordingly by removing the reference to the BER threshold. There should be no impact to most systems, but customers may observe an earlier assertion of SD in comparison to the current transceiver function.

The power consumption of the new receiver IC is lower, which results in an about 15mA lower receiver current when operated at 3.3V and about 20mA lower when operated at 5V supply voltage.

Effective Date of Change:

Product shipments using this change will begin after **1-May-2025**. Timing of shipment of the changed part will vary by part number depending on qualification completion, customer demand, and inventory levels.

Qualification Data:

Qualification samples are available.

Please contact your Broadcom field sales engineer or Contact Center for any questions or support requirements. Please acknowledge the receipt of the notice within 30 days of delivery. Lack of acknowledgement within 30 days constitutes acceptance of the change per JEDEC J-STD-046.