

Product Change Notice

Issue Date: 04-August-2026

Change Description:

Change of encoder gain settings, improving linear calibration and enabling flexibility for different codewheel and code strip reflectance.

Parts Affected:

Broadcom Part Number	Part Description
AR55-EVBR	AR55 Evaluation Board (All Protocols) and Metal Code Wheel, 1250 CPR
AR55-EVBL	AR55 Evaluation Board (All Protocols) and Metal Code Strip, 200 mm.
AR55-AS01-TR01	AR55 ASIC Protocol SSI/SPI/485/ESL, Tape and Reel 100 pieces.
AR55-AS01-TR02	AR55 ASIC Protocol SSI/SPI/485/ESL, Tape and Reel 1000 pieces.
AR55-AB01-TR01	AR55 ASIC Protocol BiSS-C, Tape and Reel 100 pieces.
AR55-AB01-TR02	AR55 ASIC Protocol BiSS-C, Tape and Reel 1000 pieces.

Description and Extent of Change:

Table 1 : Change Descriptions

Current part	New part
<u>SPI & RS485 Memory Setting</u> Page7 x 06 (Bit 7-5): Hex 28 Page8 x 3A (Bit 3-2): Hex 1C Page8 x 1C (Bit 2-0): Hex 00 Page8 x 5E (Bit 3-0): Hex 00 Page9 x 20: Hex 21 <u>BiSS-C Memory Setting</u> Bank 14 (0x0E), 0x06 (Bit 7-5): Hex 28 Bank 16 (0x10), 0x3A (Bit 3-2): Hex 1C Bank 16 (0x10), 0x1C (Bit 2-0): Hex 00 Bank 17 (0x11), 0x1E (Bit 3-0): Hex 00 Bank 18 (0x12), 0x20: Hex 21	<u>SPI & RS485 Memory Setting</u> Page7 x 06 (Bit 7-5): Hex A8 Page8 x 3A (Bit 3-2): Hex 18 Page8 x 1C (Bit 2-0): Hex 04 Page8 x 5E (Bit 3-0): Hex 0D Page9 x 20: Hex 31 <u>BiSS-C Memory Setting</u> Bank 14 (0x0E), 0x06 (Bit 7-5): Hex A8 Bank 16 (0x10), 0x3A (Bit 3-2): Hex 18 Bank 16 (0x10), 0x1C (Bit 2-0): Hex 04 Bank 17 (0x11), 0x1E (Bit 3-0): Hex 0D Bank 18 (0x12), 0x20: Hex 31

1. Improve the minimum linear calibration length to as low as 2mm
2. Improve auto-calibration flexibility to auto adjust gain settings in order to cater different reflectance of different codewheel/codestrip
3. Enhance the Code-Monotony function for encoder output monitoring after calibration
4. Enable new SPI4 protocol option for the digital Sine-Cosine output, previously only available in BiSS-C protocol



Reasons for Change:

To enable new features and capabilities for enhanced user friendliness during calibration and monitoring process.

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

There is no impact on product Form, Fit and Performance at the product level. No impact on quality and reliability.

Effective Date of Change:

Product shipment using this change effectively in or around August 2026.

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.