



Product/Process Change Notice - PCN 10_0151 Rev. A

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This notice is to inform you of a change that will be made to certain ADI products (see Material Report). Any issues with this PCN or requirements to qualify the change (additional data or samples) must be sent to ADI within 30 days of publication date. ADI contact information is listed below.

Note: Revised fields are indicated by a red field name. See Appendix B for revision history.

PCN Title: Datasheet update for ADSP-BF51x/ BF51xF Products

Publication Date: 23-Jun-2010

Effectivity Date: 23-Jun-2010 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Correcting two errors contained in the 'Description of Change' section of original PCN (Rev-).

Description Of Change

1) OPERATING CONDITIONS:

Removed redundant specifications for max. VIH and min. VIL & VILTWI

2) ELECTRICAL CHARACTERISTICS:

Modified Typical OTP Memory Read values for IDDOTP, from 1 mA to 2 mA

Modified Typical OTP Memory Write values for IDDOTP, from 2 mA to 25 mA

RevA Correction:

Modified Typical OTP Memory Write values for IDDOTP, changed from 25 mA to 2 mA

3) ABSOLUTE MAXIMUM RATINGS:

Max Internal Supply Voltage (VDDINT) increased to +1.50V

4) SERIAL PORTS:

Timing requirements for External Clock (TSUDTE & TSUDRE) updated

5) SERIAL PERIPHERAL INTERFACE (SPI) PORT- Master Timing:

Min tSPITDM switching characteristics updated for all voltages; corresponding figure updated accordingly. (See attachment)

6) SERIAL PERIPHERAL INTERFACE (SPI) PORT- Slave Timing:

Min tHDS, tSPITDS, tSDSCI switching characteristics updated for all voltages; corresponding figure updated accordingly. (See attachment)

7) RSI CONTROLLER:

Max tOH specification increased from 2.5ns to 4ns

RevA Correction:

tOH specification is not changing and remains min. 2.5ns

The specification which is changing is Max. tODLY (Output Delay Time During Data Transfer Mode).

Max tODLY is changing from 2.5ns to 4ns.

8) SURFACE MOUNT DESIGN INFORMATION FOR 12x12mm CSP_BGA PACKAGE:

Package Solder Mask Opening dimension decreased from 0.40mm diameter to 0.35mm diameter

Package Ball Pad Size decreased from 0.53mm diameter to 0.48mm diameter

9) PRODUCT ORDERING GUIDE:

Additional, Commercial grade ADSP-BF516 & BF516F Products added to Ordering Guide

Reason For Change

Updating documentation to more accurately reflect device capabilities. There is no change to the BF51x/ BF51xF product design, electrical testing or package.

Impact of the change (positive or negative) on fit, form, function & reliability

No impact on fit, form, functionality or reliability.

Summary of Supporting Information

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Changes to be reflected in ADSP-BF51x/ BF51xF, Revision A Product Datasheet.
An electrical characteristic comparison has been performed to ensure the validity of revised specifications. Supporting data will be made available upon request.

Supporting Documents None

For questions on this PCN, send email to the regional contacts below or contact your local ADI sales representative

Americas:	PCN_Americas@analog.com	Europe:	PCN_Europe@analog.com	Japan:	PCN_Japan@analog.com
				Rest of Asia:	PCN_ROA@analog.com

Appendix A - Affected ADI Models

Existing Parts - Product Family / Model Number (40)

ADSP-BF512 / ADSP-BF512BBCZ-3	ADSP-BF512 / ADSP-BF512BBCZ-4	ADSP-BF512 / ADSP-BF512BSWZ-3	ADSP-BF512 / ADSP-BF512BSWZ-4	ADSP-BF512 / ADSP-BF512KBCZ-3	ADSP-BF512 / ADSP-BF512KBCZ-4
ADSP-BF512 / ADSP-BF512KSWZ-3	ADSP-BF512 / ADSP-BF512KSWZ-4	ADSP-BF512F / ADSP-BF512BBCZ-4F4	ADSP-BF512F / ADSP-BF512BSWZ-4F4	ADSP-BF512F / ADSP-BF512KBCZ-4F4	ADSP-BF512F / ADSP-BF512KSWZ-4F4
ADSP-BF514 / ADSP-BF514BBCZ-3	ADSP-BF514 / ADSP-BF514BBCZ-4	ADSP-BF514 / ADSP-BF514BSWZ-3	ADSP-BF514 / ADSP-BF514BSWZ-4	ADSP-BF514 / ADSP-BF514KBCZ-3	ADSP-BF514 / ADSP-BF514KBCZ-4
ADSP-BF514 / ADSP-BF514KSWZ-3	ADSP-BF514 / ADSP-BF514KSWZ-4	ADSP-BF514F / ADSP-BF514BBCZ-4F4	ADSP-BF514F / ADSP-BF514BSWZ-4F4	ADSP-BF514F / ADSP-BF514KBCZ-4F4	ADSP-BF514F / ADSP-BF514KSWZ-4F4
ADSP-BF516 / ADSP-BF516BBCZ-3	ADSP-BF516 / ADSP-BF516BBCZ-4	ADSP-BF516 / ADSP-BF516BSWZ-3	ADSP-BF516 / ADSP-BF516BSWZ-4	ADSP-BF516 / ADSP-BF516KBCZ-3	ADSP-BF516 / ADSP-BF516KBCZ-4
ADSP-BF516 / ADSP-BF516KSWZ-3	ADSP-BF516 / ADSP-BF516KSWZ-4	ADSP-BF516F / ADSP-BF516BBCZ-4F4	ADSP-BF516F / ADSP-BF516BSWZ-4F4	ADSP-BF516F / ADSP-BF516KBCZ-4F4	ADSP-BF516F / ADSP-BF516KSWZ-4F4
ADSP-BF518 / ADSP-BF518BBCZ-4	ADSP-BF518 / ADSP-BF518BSWZ-4	ADSP-BF518F / ADSP-BF518BBCZ-4F4	ADSP-BF518F / ADSP-BF518BSWZ-4F4		

Appendix B - Revision History

Rev	Publish Date	Rev Description
Rev. -	09-Jun-2010	Initial Release
Rev. A	23-Jun-2010	Correcting two errors contained in the 'Description of Change' section of original PCN (Rev-).

Analog Devices, Inc.

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