



PCN# 02B-12, issued on February 6, 2012 will supersede PCN# 02A-12, issued on January 30, 2012.

February 6, 2012

PCN#	Issue Date	Description
02A-12	January 30, 2012	Initial release.
02B-12	February 6, 2012	Software version affected by this PCN is corrected as Lattice Diamond 1.4.2

Subject: PCN# 02B-12 Notification of a Revision to the LatticeXP2, LA-LatticeXP2 and LatticeECP2/M Data Sheets

Dear Lattice Customer,

Lattice is providing this notification of our intent to revise the LatticeXP2™, LA-LatticeXP2 and LatticeECP2™/M Data Sheets. The revision pertains to the removal of Soft Error Detect (SED) capability during normal active operation for all LatticeXP2, LA-LatticeXP2, and LatticeECP2/M devices. SED will continue to be available on devices when user logic is inactive.

See Exhibit “A” for a summary of changes to the data sheets listed below:

- LatticeECP2/M Family Data Sheet DS1006 Version 03.9, released in January 2012
- LatticeXP2 Family Data Sheet DS1009 Version 01.8, released in January 2012
- LA-LatticeXP2 Automotive Family Data Sheet DS1024 Version 01.3, released in January 2012

The SED logic that comes with LatticeXP2, LA-LatticeXP2 and LatticeECP2/M devices is a supplemental function that is not active without explicit selection by the designer. Designs that do not use this functionality are not affected by this PCN. Lattice’s analysis of customer cases shows that less than 1% of the active customer base utilize this feature.

AFFECTED DEVICES

This PCN affects all devices listed in Exhibit “B” (also available in an Excel spreadsheet [here](#)). This PCN also affects any custom devices (i.e. factory programmed, special test, etc.) which are derived from any of the devices listed. All shipments of the indicated devices prior to this PCN are also affected. The OPNs remain unchanged for all affected devices.

DATA SHEET SPECIFICATIONS

The revised LatticeECP2/M data sheet ([DS1006](#) version 03.9 released in January 2012) reflects these changes. The revised LatticeXP2 data sheet ([DS1009](#) Version 01.8 released in January 2012) reflects these changes. The revised LA-LatticeXP2 data sheet ([DS1024](#) Version 01.3 released in January 2012) reflects these changes.

SOFTWARE SUPPORT

Lattice Diamond[®] 1.4.2 (due to be released in April 2012) has been modified to provide a warning to those designers that utilize the SEDA, SEDB or SEDAA library elements.

The warning reads as follows:

“Warning - The Soft Error Detect (SED) during normal active operation has been removed from this product (please refer to PCN#02B-12). The SED function can still run on a programmed device when the user logic is inactive. For additional questions, please contact Lattice Tech Support.”

TIMING

These data sheet changes are effective immediately.

RESPONSE

Those customers using SED on their LatticeXP2, LA-LatticeXP2, or LatticeECP2/M devices should contact local field support immediately for instructions on next steps.

Lattice PCNs are available on the [Lattice website](#). Please sign up to receive e-mail PCN alerts by registering [here](#). If you already have a Lattice web account and wish to receive PCN alerts, you can do so by logging into your account and making edits to your subscription options.

CONTACT

If you have any questions or require additional information, please contact pcn@latticesemi.com.

Sincerely,

Lattice Semiconductor PCN Administration

EXHIBIT “A” – SUMMARY OF DATA SHEET CHANGES

LatticeXP2 Data Sheet Changes (Highlighted below)

1) Architecture Overview (page 2-1)

This family also provides an on-chip oscillator ~~and Soft Error Detect (SED) capability~~. LatticeXP2 devices use 1.2V as their core voltage.

2) Soft Error Detect Support (page 2-40)

LatticeXP2 devices have dedicated logic to perform Cyclic Redundancy Code (CRC) checks. During configuration, the configuration data bitstream can be checked with the CRC logic block. In addition, LatticeXP2 devices can be programmed for checking soft errors in SRAM. ~~SED can be run on a programmed part when the user logic is not active. The SED operation can run in the background during user mode (normal operation).~~ In the event a soft error occurs, the device can be programmed to either reload from a known good boot image (from internal Flash or external SPI memory) or generate an error signal.

LA-LatticeXP2 Data Sheet Changes (Highlighted below)

1) Architecture Overview (page 2-1)

This family also provides an on-chip oscillator ~~and Soft Error Detect (SED) capability~~. LA-LatticeXP2 devices use 1.2V as their core voltage.

2) Soft Error Detect Support (page 2-40)

LA-LatticeXP2 devices have dedicated logic to perform Cyclic Redundancy Code (CRC) checks. During configuration, the configuration data bitstream can be checked with the CRC logic block. In addition, LA-LatticeXP2 devices can be programmed for checking soft errors in SRAM. ~~SED can be run on a programmed part when the user logic is not active. The SED operation can run in the background during user mode (normal operation).~~ In the event a soft error occurs, the device can be programmed to either reload from a known good boot image (from internal Flash or external SPI memory) or generate an error signal.

LatticeECP2/M Data Sheet Changes (Highlighted below)

1) Soft Error Detect (SED) Support (page 2-48 to 2-49)

LatticeECP2/M devices have dedicated logic to perform CRC checks. During configuration, the configuration data bitstream can be checked with the CRC logic block. In addition, the LatticeECP2 device can also be programmed for checking soft errors (SED) in SRAM. ~~SED can be run on a programmed part when the user logic is not active. This SED operation can be run in the background during user mode.~~ If a soft error occurs, during user mode (normal operation) the device can be programmed to either reload from a known good boot image or generate an error signal.

EXHIBIT “B” – AFFECTED DEVICES

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LA-LatticeXP2	LAXP2-5E	132-csBGA	n/a	LAXP2-5E-5MN132E
		144-TQFP		LAXP2-5E-5TN144E
		208-PQFP		LAXP2-5E-5QN208E
		256-ftBGA		LAXP2-5E-5FTN256E
	LAXP2-8E	132-csBGA		LAXP2-8E-5MN132E
		144-TQFP		LAXP2-8E-5TN144E
		208-PQFP		LAXP2-8E-5QN208E
		256-ftBGA		LAXP2-8E-5FTN256E
	LAXP2-17E	208-PQFP		LAXP2-17E-5QN208E
		256-ftBGA		LAXP2-17E-5FTN256E
	LatticeXP2	LFXP2-5E		132-csBGA
LFXP2-5E-6M132C			LFXP2-5E-6MN132C	
LFXP2-5E-7M132C			LFXP2-5E-7MN132C	
LFXP2-5E-5M132I			LFXP2-5E-5MN132I	
LFXP2-5E-6M132I			LFXP2-5E-6MN132I	
144-TQFP			n/a	LFXP2-5E-5TN144C
				LFXP2-5E-6TN144C
				LFXP2-5E-7TN144C
				LFXP2-5E-5TN144I
				LFXP2-5E-6TN144I
208-PQFP			n/a	LFXP2-5E-5QN208C
				LFXP2-5E-6QN208C
				LFXP2-5E-7QN208C
				LFXP2-5E-5QN208I
				LFXP2-5E-6QN208I
256-ftBGA		LFXP2-5E-5FT256C	LFXP2-5E-5FTN256C	
		LFXP2-5E-6FT256C	LFXP2-5E-6FTN256C	
		LFXP2-5E-7FT256C	LFXP2-5E-7FTN256C	
		LFXP2-5E-5FT256I	LFXP2-5E-5FTN256I	
		LFXP2-5E-6FT256I	LFXP2-5E-6FTN256I	
LFXP2-8E		132-csBGA	LFXP2-8E-5M132C	LFXP2-8E-5MN132C
			LFXP2-8E-6M132C	LFXP2-8E-6MN132C
			LFXP2-8E-7M132C	LFXP2-8E-7MN132C
	LFXP2-8E-5M132I		LFXP2-8E-5MN132I	
	LFXP2-8E-6M132I		LFXP2-8E-6MN132I	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number		
			Sn-Pb	Pb-Free	
LatticeXP2 (cont.)	LFXP2-8E (cont.)	144-TQFP	n/a	LFXP2-8E-5TN144C	
				LFXP2-8E-6TN144C	
				LFXP2-8E-7TN144C	
				LFXP2-8E-5TN144I	
				LFXP2-8E-6TN144I	
		208-PQFP	n/a	LFXP2-8E-5QN208C	
				LFXP2-8E-6QN208C	
				LFXP2-8E-7QN208C	
				LFXP2-8E-5QN208I	
				LFXP2-8E-6QN208I	
		256-ftBGA	LFXP2-8E-5FT256C	LFXP2-8E-5FTN256C	
			LFXP2-8E-6FT256C	LFXP2-8E-6FTN256C	
			LFXP2-8E-7FT256C	LFXP2-8E-7FTN256C	
			LFXP2-8E-5FT256I	LFXP2-8E-5FTN256I	
			LFXP2-8E-6FT256I	LFXP2-8E-6FTN256I	
	LFXP2-17E	208-PQFP	n/a	LFXP2-17E-5QN208C	
				LFXP2-17E-6QN208C	
				LFXP2-17E-7QN208C	
				LFXP2-17E-5QN208I	
				LFXP2-17E-6QN208I	
		256-ftBGA	LFXP2-17E-5FT256C	LFXP2-17E-5FTN256C	
			LFXP2-17E-6FT256C	LFXP2-17E-6FTN256C	
			LFXP2-17E-7FT256C	LFXP2-17E-7FTN256C	
			LFXP2-17E-5FT256I	LFXP2-17E-5FTN256I	
			LFXP2-17E-6FT256I	LFXP2-17E-6FTN256I	
		484-fpBGA	LFXP2-17E-5F484C	LFXP2-17E-5FN484C	
			LFXP2-17E-6F484C	LFXP2-17E-6FN484C	
			LFXP2-17E-7F484C	LFXP2-17E-7FN484C	
			LFXP2-17E-5F484I	LFXP2-17E-5FN484I	
			LFXP2-17E-6F484I	LFXP2-17E-6FN484I	
		LFXP2-30E	256-ftBGA	LFXP2-30E-5FT256C	LFXP2-30E-5FTN256C
				LFXP2-30E-6FT256C	LFXP2-30E-6FTN256C
LFXP2-30E-7FT256C	LFXP2-30E-7FTN256C				
LFXP2-30E-5FT256I	LFXP2-30E-5FTN256I				
LFXP2-30E-6FT256I	LFXP2-30E-6FTN256I				
484-fpBGA	LFXP2-30E-5F484C		LFXP2-30E-5FN484C		
	LFXP2-30E-6F484C		LFXP2-30E-6FN484C		
	LFXP2-30E-5F484I		LFXP2-30E-5FN484I		

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number			
			Sn-Pb	Pb-Free		
LatticeXP2 (cont.)	LFXP2-30E (cont.)	484-fpBGA (cont.)	LFXP2-30E-7F484C	LFXP2-30E-7FN484C		
			LFXP2-30E-5F484I	LFXP2-30E-5FN484I		
			LFXP2-30E-6F484I	LFXP2-30E-6FN484I		
		672-fpBGA	LFXP2-30E-5F672C	LFXP2-30E-5FN672C		
			LFXP2-30E-6F672C	LFXP2-30E-6FN672C		
			LFXP2-30E-7F672C	LFXP2-30E-7FN672C		
	LFXP2-30E-5F672I		LFXP2-30E-5FN672I			
	LFXP2-40E	484-fpBGA	LFXP2-40E-5F484C	LFXP2-40E-5FN484C		
			LFXP2-40E-6F484C	LFXP2-40E-6FN484C		
			LFXP2-40E-7F484C	LFXP2-40E-7FN484C		
			LFXP2-40E-5F484I	LFXP2-40E-5FN484I		
			LFXP2-40E-6F484I	LFXP2-40E-6FN484I		
			LFXP2-40E-5F672C	LFXP2-40E-5FN672C		
		672-fpBGA	LFXP2-40E-6F672C	LFXP2-40E-6FN672C		
			LFXP2-40E-7F672C	LFXP2-40E-7FN672C		
			LFXP2-40E-5F672I	LFXP2-40E-5FN672I		
			LFXP2-40E-6F672I	LFXP2-40E-6FN672I		
			LatticeECP2	LFE2-6E	144-TQFP	LFE2-6E-5T144C
LFE2-6E-6T144C						LFE2-6E-6TN144C
LFE2-6E-7T144C	LFE2-6E-7TN144C					
LFE2-6E-5T144I	LFE2-6E-5TN144I					
LFE2-6E-6T144I	LFE2-6E-6TN144I					
256-fpBGA	LFE2-6E-5F256C	LFE2-6E-5FN256C				
	LFE2-6E-6F256C	LFE2-6E-6FN256C				
	LFE2-6E-7F256C	LFE2-6E-7FN256C				
	LFE2-6E-5F256I	LFE2-6E-5FN256I				
	LFE2-6E-6F256I	LFE2-6E-6FN256I				
LFE2-6SE	144-TQFP	LFE2-6SE-5T144C	LFE2-6SE-5TN144C			
		LFE2-6SE-6T144C	LFE2-6SE-6TN144C			
		LFE2-6SE-7T144C	LFE2-6SE-7TN144C			
		LFE2-6SE-5T144I	LFE2-6SE-5TN144I			
		LFE2-6SE-6T144I	LFE2-6SE-6TN144I			

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Product Family	Product Line	Package Type	Ordering Part Number		
			Sn-Pb	Pb-Free	
LatticeECP2 (cont.)	LFE2-6SE (cont.)	256-fpBGA	LFE2-6SE-5F256C	LFE2-6SE-5FN256C	
			LFE2-6SE-6F256C	LFE2-6SE-6FN256C	
			LFE2-6SE-7F256C	LFE2-6SE-7FN256C	
			LFE2-6SE-5F256I	LFE2-6SE-5FN256I	
			LFE2-6SE-6F256I	LFE2-6SE-6FN256I	
	LFE2-12E	144-TQFP	LFE2-12E-5T144C	LFE2-12E-5TN144C	
			LFE2-12E-6T144C	LFE2-12E-6TN144C	
			LFE2-12E-7T144C	LFE2-12E-7TN144C	
			LFE2-12E-5T144I	LFE2-12E-5TN144I	
			LFE2-12E-6T144I	LFE2-12E-6TN144I	
		208-PQFP	LFE2-12E-5Q208C	LFE2-12E-5QN208C	
			LFE2-12E-6Q208C	LFE2-12E-6QN208C	
			LFE2-12E-7Q208C	LFE2-12E-7QN208C	
			LFE2-12E-5Q208I	LFE2-12E-5QN208I	
			LFE2-12E-6Q208I	LFE2-12E-6QN208I	
		256-fpBGA	LFE2-12E-5F256C	LFE2-12E-5FN256C	
			LFE2-12E-6F256C	LFE2-12E-6FN256C	
			LFE2-12E-7F256C	LFE2-12E-7FN256C	
			LFE2-12E-5F256I	LFE2-12E-5FN256I	
			LFE2-12E-6F256I	LFE2-12E-6FN256I	
		484-fpBGA	LFE2-12E-5F484C	LFE2-12E-5FN484C	
			LFE2-12E-6F484C	LFE2-12E-6FN484C	
			LFE2-12E-7F484C	LFE2-12E-7FN484C	
			LFE2-12E-5F484I	LFE2-12E-5FN484I	
			LFE2-12E-6F484I	LFE2-12E-6FN484I	
		LFE2-12SE	144-TQFP	LFE2-12SE-5T144C	LFE2-12SE-5TN144C
				LFE2-12SE-6T144C	LFE2-12SE-6TN144C
				LFE2-12SE-7T144C	LFE2-12SE-7TN144C
				LFE2-12SE-5T144I	LFE2-12SE-5TN144I
				LFE2-12SE-6T144I	LFE2-12SE-6TN144I
	208-PQFP		LFE2-12SE-5Q208C	LFE2-12SE-5QN208C	
			LFE2-12SE-6Q208C	LFE2-12SE-6QN208C	
			LFE2-12SE-7Q208C	LFE2-12SE-7QN208C	
			LFE2-12SE-5Q208I	LFE2-12SE-5QN208I	
			LFE2-12SE-6Q208I	LFE2-12SE-6QN208I	
	256-fpBGA		LFE2-12SE-5F256C	LFE2-12SE-5FN256C	
			LFE2-12SE-6F256C	LFE2-12SE-6FN256C	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number			
			Sn-Pb	Pb-Free		
LatticeECP2 (cont.)	LFE2-12SE (cont.)	256-fpBGA (cont.)	LFE2-12SE-7F256C	LFE2-12SE-7FN256C		
			LFE2-12SE-5F256I	LFE2-12SE-5FN256I		
			LFE2-12SE-6F256I	LFE2-12SE-6FN256I		
		484-fpBGA	LFE2-12SE-5F484C	LFE2-12SE-5FN484C		
			LFE2-12SE-6F484C	LFE2-12SE-6FN484C		
			LFE2-12SE-7F484C	LFE2-12SE-7FN484C		
			LFE2-12SE-5F484I	LFE2-12SE-5FN484I		
			LFE2-12SE-6F484I	LFE2-12SE-6FN484I		
			LFE2-20E	208-PQFP	LFE2-20E-5Q208C	LFE2-20E-5QN208C
					LFE2-20E-6Q208C	LFE2-20E-6QN208C
	LFE2-20E-7Q208C	LFE2-20E-7QN208C				
	LFE2-20E-5Q208I	LFE2-20E-5QN208I				
	LFE2-20E-6Q208I	LFE2-20E-6QN208I				
	256-fpBGA	LFE2-20E-5F256C		LFE2-20E-5FN256C		
		LFE2-20E-6F256C		LFE2-20E-6FN256C		
		LFE2-20E-7F256C		LFE2-20E-7FN256C		
		LFE2-20E-5F256I		LFE2-20E-5FN256I		
		LFE2-20E-6F256I		LFE2-20E-6FN256I		
	484-fpBGA	LFE2-20E-5F484C	LFE2-20E-5FN484C			
		LFE2-20E-6F484C	LFE2-20E-6FN484C			
		LFE2-20E-7F484C	LFE2-20E-7FN484C			
		LFE2-20E-5F484I	LFE2-20E-5FN484I			
		LFE2-20E-6F484I	LFE2-20E-6FN484I			
		672-fpBGA	LFE2-20E-5F672C	LFE2-20E-5FN672C		
			LFE2-20E-6F672C	LFE2-20E-6FN672C		
			LFE2-20E-7F672C	LFE2-20E-7FN672C		
			LFE2-20E-5F672I	LFE2-20E-5FN672I		
			LFE2-20E-6F672I	LFE2-20E-6FN672I		
	LFE2-20SE	208-PQFP	LFE2-20SE-5Q208C	LFE2-20SE-5QN208C		
			LFE2-20SE-6Q208C	LFE2-20SE-6QN208C		
			LFE2-20SE-7Q208C	LFE2-20SE-7QN208C		
			LFE2-20SE-5Q208I	LFE2-20SE-5QN208I		
			LFE2-20SE-6Q208I	LFE2-20SE-6QN208I		

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number		
			Sn-Pb	Pb-Free	
LatticeECP2 (cont.)	LFE2-20SE (cont.)	256-fpBGA	LFE2-20SE-5F256C	LFE2-20SE-5FN256C	
			LFE2-20SE-6F256C	LFE2-20SE-6FN256C	
			LFE2-20SE-7F256C	LFE2-20SE-7FN256C	
			LFE2-20SE-5F256I	LFE2-20SE-5FN256I	
			LFE2-20SE-6F256I	LFE2-20SE-6FN256I	
		484-fpBGA	LFE2-20SE-5F484C	LFE2-20SE-5FN484C	
			LFE2-20SE-6F484C	LFE2-20SE-6FN484C	
			LFE2-20SE-7F484C	LFE2-20SE-7FN484C	
			LFE2-20SE-5F484I	LFE2-20SE-5FN484I	
			LFE2-20SE-6F484I	LFE2-20SE-6FN484I	
		672-fpBGA	LFE2-20SE-5F672C	LFE2-20SE-5FN672C	
			LFE2-20SE-6F672C	LFE2-20SE-6FN672C	
			LFE2-20SE-7F672C	LFE2-20SE-7FN672C	
			LFE2-20SE-5F672I	LFE2-20SE-5FN672I	
			LFE2-20SE-6F672I	LFE2-20SE-6FN672I	
	LFE2-35E	484-fpBGA	LFE2-35E-5F484C	LFE2-35E-5FN484C	
			LFE2-35E-6F484C	LFE2-35E-6FN484C	
			LFE2-35E-7F484C	LFE2-35E-7FN484C	
			LFE2-35E-5F484I	LFE2-35E-5FN484I	
			LFE2-35E-6F484I	LFE2-35E-6FN484I	
		672-fpBGA	LFE2-35E-5F672C	LFE2-35E-5FN672C	
			LFE2-35E-6F672C	LFE2-35E-6FN672C	
			LFE2-35E-7F672C	LFE2-35E-7FN672C	
			LFE2-35E-5F672I	LFE2-35E-5FN672I	
			LFE2-35E-6F672I	LFE2-35E-6FN672I	
		LFE2-35SE	484-fpBGA	LFE2-35SE-5F484C	LFE2-35SE-5FN484C
				LFE2-35SE-6F484C	LFE2-35SE-6FN484C
				LFE2-35SE-7F484C	LFE2-35SE-7FN484C
				LFE2-35SE-5F484I	LFE2-35SE-5FN484I
				LFE2-35SE-6F484I	LFE2-35SE-6FN484I
	672-fpBGA		LFE2-35SE-5F672C	LFE2-35SE-5FN672C	
			LFE2-35SE-6F672C	LFE2-35SE-6FN672C	
			LFE2-35SE-7F672C	LFE2-35SE-7FN672C	
			LFE2-35SE-5F672I	LFE2-35SE-5FN672I	
			LFE2-35SE-6F672I	LFE2-35SE-6FN672I	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LatticeECP2 (cont.)	LFE2-50E	484-fpBGA	LFE2-50E-5F484C	LFE2-50E-5FN484C
			LFE2-50E-6F484C	LFE2-50E-6FN484C
			LFE2-50E-7F484C	LFE2-50E-7FN484C
			LFE2-50E-5F484I	LFE2-50E-5FN484I
			LFE2-50E-6F484I	LFE2-50E-6FN484I
		672-fpBGA	LFE2-50E-5F672C	LFE2-50E-5FN672C
			LFE2-50E-6F672C	LFE2-50E-6FN672C
			LFE2-50E-7F672C	LFE2-50E-7FN672C
			LFE2-50E-5F672I	LFE2-50E-5FN672I
			LFE2-50E-6F672I	LFE2-50E-6FN672I
	LFE2-50SE	484-fpBGA	LFE2-50SE-5F484C	LFE2-50SE-5FN484C
			LFE2-50SE-6F484C	LFE2-50SE-6FN484C
			LFE2-50SE-7F484C	LFE2-50SE-7FN484C
			LFE2-50SE-5F484I	LFE2-50SE-5FN484I
			LFE2-50SE-6F484I	LFE2-50SE-6FN484I
		672-fpBGA	LFE2-50SE-5F672C	LFE2-50SE-5FN672C
			LFE2-50SE-6F672C	LFE2-50SE-6FN672C
			LFE2-50SE-7F672C	LFE2-50SE-7FN672C
			LFE2-50SE-5F672I	LFE2-50SE-5FN672I
			LFE2-50SE-6F672I	LFE2-50SE-6FN672I
	LFE2-70E	672-fpBGA	LFE2-70E-5F672C	LFE2-70E-5FN672C
			LFE2-70E-6F672C	LFE2-70E-6FN672C
			LFE2-70E-7F672C	LFE2-70E-7FN672C
			LFE2-70E-5F672I	LFE2-70E-5FN672I
			LFE2-70E-6F672I	LFE2-70E-6FN672I
		900-fpBGA	LFE2-70E-5F900C	LFE2-70E-5FN900C
			LFE2-70E-6F900C	LFE2-70E-6FN900C
			LFE2-70E-7F900C	LFE2-70E-7FN900C
			LFE2-70E-5F900I	LFE2-70E-5FN900I
			LFE2-70E-6F900I	LFE2-70E-6FN900I
	LFE2-70SE	672-fpBGA	LFE2-70SE-5F672C	LFE2-70SE-5FN672C
			LFE2-70SE-6F672C	LFE2-70SE-6FN672C
			LFE2-70SE-7F672C	LFE2-70SE-7FN672C
LFE2-70SE-5F672I			LFE2-70SE-5FN672I	
LFE2-70SE-6F672I			LFE2-70SE-6FN672I	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LatticeECP2 (cont.)	LFE2-70SE (cont.)	900-fpBGA	LFE2-70SE-5F900C	LFE2-70SE-5FN900C
			LFE2-70SE-6F900C	LFE2-70SE-6FN900C
			LFE2-70SE-7F900C	LFE2-70SE-7FN900C
			LFE2-70SE-5F900I	LFE2-70SE-5FN900I
			LFE2-70SE-6F900I	LFE2-70SE-6FN900I
LatticeECP2M	LFE2M20E	256-fpBGA	LFE2M20E-5F256C	LFE2M20E-5FN256C
			LFE2M20E-6F256C	LFE2M20E-6FN256C
			LFE2M20E-7F256C	LFE2M20E-7FN256C
			LFE2M20E-5F256I	LFE2M20E-5FN256I
			LFE2M20E-6F256I	LFE2M20E-6FN256I
		484-fpBGA	LFE2M20E-5F484C	LFE2M20E-5FN484C
			LFE2M20E-6F484C	LFE2M20E-6FN484C
			LFE2M20E-7F484C	LFE2M20E-7FN484C
			LFE2M20E-5F484I	LFE2M20E-5FN484I
			LFE2M20E-6F484I	LFE2M20E-6FN484I
	LFE2M20SE	256-fpBGA	LFE2M20SE-5F256C	LFE2M20SE-5FN256C
			LFE2M20SE-6F256C	LFE2M20SE-6FN256C
			LFE2M20SE-7F256C	LFE2M20SE-7FN256C
			LFE2M20SE-5F256I	LFE2M20SE-5FN256I
			LFE2M20SE-6F256I	LFE2M20SE-6FN256I
		484-fpBGA	LFE2M20SE-5F484C	LFE2M20SE-5FN484C
			LFE2M20SE-6F484C	LFE2M20SE-6FN484C
			LFE2M20SE-7F484C	LFE2M20SE-7FN484C
			LFE2M20SE-5F484I	LFE2M20SE-5FN484I
			LFE2M20SE-6F484I	LFE2M20SE-6FN484I
	LFE2M35E	256-fpBGA	LFE2M35E-5F256C	LFE2M35E-5FN256C
			LFE2M35E-6F256C	LFE2M35E-6FN256C
			LFE2M35E-7F256C	LFE2M35E-7FN256C
			LFE2M35E-5F256I	LFE2M35E-5FN256I
			LFE2M35E-6F256I	LFE2M35E-6FN256I
484-fpBGA		LFE2M35E-5F484C	LFE2M35E-5FN484C	
		LFE2M35E-6F484C	LFE2M35E-6FN484C	
		LFE2M35E-7F484C	LFE2M35E-7FN484C	
		LFE2M35E-5F484I	LFE2M35E-5FN484I	
		LFE2M35E-6F484I	LFE2M35E-6FN484I	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LatticeECP2M (cont.)	LFE2M35E (cont.)	672-fpBGA	LFE2M35E-5F672C	LFE2M35E-5FN672C
			LFE2M35E-6F672C	LFE2M35E-6FN672C
			LFE2M35E-7F672C	LFE2M35E-7FN672C
			LFE2M35E-5F672I	LFE2M35E-5FN672I
			LFE2M35E-6F672I	LFE2M35E-6FN672I
	LFE2M35SE	256-fpBGA	LFE2M35SE-5F256C	LFE2M35SE-5FN256C
			LFE2M35SE-6F256C	LFE2M35SE-6FN256C
			LFE2M35SE-7F256C	LFE2M35SE-7FN256C
			LFE2M35SE-5F256I	LFE2M35SE-5FN256I
			LFE2M35SE-6F256I	LFE2M35SE-6FN256I
		484-fpBGA	LFE2M35SE-5F484C	LFE2M35SE-5FN484C
			LFE2M35SE-6F484C	LFE2M35SE-6FN484C
			LFE2M35SE-7F484C	LFE2M35SE-7FN484C
			LFE2M35SE-5F484I	LFE2M35SE-5FN484I
			LFE2M35SE-6F484I	LFE2M35SE-6FN484I
		672-fpBGA	LFE2M35SE-5F672C	LFE2M35SE-5FN672C
			LFE2M35SE-6F672C	LFE2M35SE-6FN672C
			LFE2M35SE-7F672C	LFE2M35SE-7FN672C
			LFE2M35SE-5F672I	LFE2M35SE-5FN672I
			LFE2M35SE-6F672I	LFE2M35SE-6FN672I
	LFE2M50E	484-fpBGA	LFE2M50E-5F484C	LFE2M50E-5FN484C
			LFE2M50E-6F484C	LFE2M50E-6FN484C
			LFE2M50E-7F484C	LFE2M50E-7FN484C
			LFE2M50E-5F484I	LFE2M50E-5FN484I
			LFE2M50E-6F484I	LFE2M50E-6FN484I
		672-fpBGA	LFE2M50E-5F672C	LFE2M50E-5FN672C
			LFE2M50E-6F672C	LFE2M50E-6FN672C
			LFE2M50E-7F672C	LFE2M50E-7FN672C
			LFE2M50E-5F672I	LFE2M50E-5FN672I
			LFE2M50E-6F672I	LFE2M50E-6FN672I
		900-fpBGA	LFE2M50E-5F900C	LFE2M50E-5FN900C
			LFE2M50E-6F900C	LFE2M50E-6FN900C
			LFE2M50E-7F900C	LFE2M50E-7FN900C
LFE2M50E-5F900I	LFE2M50E-5FN900I			
LFE2M50E-6F900I	LFE2M50E-6FN900I			

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LatticeECP2M (cont.)	LFE2M50SE	484-fpBGA	LFE2M50SE-5F484C	LFE2M50SE-5FN484C
			LFE2M50SE-6F484C	LFE2M50SE-6FN484C
			LFE2M50SE-7F484C	LFE2M50SE-7FN484C
			LFE2M50SE-5F484I	LFE2M50SE-5FN484I
			LFE2M50SE-6F484I	LFE2M50SE-6FN484I
		672-fpBGA	LFE2M50SE-5F672C	LFE2M50SE-5FN672C
			LFE2M50SE-6F672C	LFE2M50SE-6FN672C
			LFE2M50SE-7F672C	LFE2M50SE-7FN672C
			LFE2M50SE-5F672I	LFE2M50SE-5FN672I
			LFE2M50SE-6F672I	LFE2M50SE-6FN672I
		900-fpBGA	LFE2M50SE-5F900C	LFE2M50SE-5FN900C
			LFE2M50SE-6F900C	LFE2M50SE-6FN900C
			LFE2M50SE-7F900C	LFE2M50SE-7FN900C
			LFE2M50SE-5F900I	LFE2M50SE-5FN900I
			LFE2M50SE-6F900I	LFE2M50SE-6FN900I
	LFE2M70E	900-fpBGA	LFE2M70E-5F900C	LFE2M70E-5FN900C
			LFE2M70E-6F900C	LFE2M70E-6FN900C
			LFE2M70E-7F900C	LFE2M70E-7FN900C
			LFE2M70E-5F900I	LFE2M70E-5FN900I
			LFE2M70E-6F900I	LFE2M70E-6FN900I
		1152-fpBGA	LFE2M70E-5F1152C	LFE2M70E-5FN1152C
			LFE2M70E-6F1152C	LFE2M70E-6FN1152C
			LFE2M70E-7F1152C	LFE2M70E-7FN1152C
			LFE2M70E-5F1152I	LFE2M70E-5FN1152I
			LFE2M70E-6F1152I	LFE2M70E-6FN1152I
	LFE2M70SE	900-fpBGA	LFE2M70SE-5F900C	LFE2M70SE-5FN900C
			LFE2M70SE-6F900C	LFE2M70SE-6FN900C
			LFE2M70SE-7F900C	LFE2M70SE-7FN900C
			LFE2M70SE-5F900I	LFE2M70SE-5FN900I
			LFE2M70SE-6F900I	LFE2M70SE-6FN900I
		1152-fpBGA	LFE2M70SE-5F1152C	LFE2M70SE-5FN1152C
			LFE2M70SE-6F1152C	LFE2M70SE-6FN1152C
			LFE2M70SE-7F1152C	LFE2M70SE-7FN1152C
			LFE2M70SE-5F1152I	LFE2M70SE-5FN1152I
			LFE2M70SE-6F1152I	LFE2M70SE-6FN1152I

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.

Product Family	Product Line	Package Type	Ordering Part Number	
			Sn-Pb	Pb-Free
LatticeECP2M (cont.)	LFE2M100E	900-fpBGA	LFE2M100E-5F900C	LFE2M100E-5FN900C
			LFE2M100E-6F900C	LFE2M100E-6FN900C
			LFE2M100E-7F900C	LFE2M100E-7FN900C
			LFE2M100E-5F900I	LFE2M100E-5FN900I
			LFE2M100E-6F900I	LFE2M100E-6FN900I
		1152-fpBGA	LFE2M100E-5F1152C	LFE2M100E-5FN1152C
			LFE2M100E-6F1152C	LFE2M100E-6FN1152C
			LFE2M100E-7F1152C	LFE2M100E-7FN1152C
			LFE2M100E-5F1152I	LFE2M100E-5FN1152I
			LFE2M100E-6F1152I	LFE2M100E-6FN1152I
	LFE2M100SE	900-fpBGA	LFE2M100SE-5F900C	LFE2M100SE-5FN900C
			LFE2M100SE-6F900C	LFE2M100SE-6FN900C
			LFE2M100SE-7F900C	LFE2M100SE-7FN900C
			LFE2M100SE-5F900I	LFE2M100SE-5FN900I
			LFE2M100SE-6F900I	LFE2M100SE-6FN900I
		1152-fpBGA	LFE2M100SE-5F1152C	LFE2M100SE-5FN1152C
			LFE2M100SE-6F1152C	LFE2M100SE-6FN1152C
			LFE2M100SE-7F1152C	LFE2M100SE-7FN1152C
			LFE2M100SE-5F1152I	LFE2M100SE-5FN1152I
			LFE2M100SE-6F1152I	LFE2M100SE-6FN1152I

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed above.