



July 1, 2011

Subject: Courtesy Notification of Additional Ejector Pin Sites on Select BGA Packages

Dear Lattice Customers:

Lattice is providing this courtesy notification regarding additional ejector pin sites on select Fine Pitch Ball Grid Array (fpBGA) and Plastic Ball Grid Array (BGA) devices.

CHANGE DESCRIPTION

The Malaysian facility of Advanced Semiconductor Engineering (ASE) is adding ejector pin marks for the select 23x23mm and 27x27mm fpBGA and BGA package devices. As shown below, additional ejector pin marks will be added to the upper right corner and lower left corner. There are no changes to the package dimensions.

Current Ejector Pin Marking



New Ejector Pin Marking



AFFECTED DEVICES

Affected devices are listed in Exhibit A. This notification also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc), which are derived from any of the devices listed.

DATA SHEET SPECIFICATIONS

This notification has no impact on any product data sheet specifications.

TIMING

This change is effective immediately.

RESPONSE

No response is required to this notification.

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" – Affected Device List

Product Family	Product Line	Ordering Part Number	Package	Ordering Part Number	Package
LatticeEC™	LFEC15E	LFEC15E-3F484C	484-fpBGA	LFEC15E-3FN484C	Pb-Free 484-fpBGA
		LFEC15E-4F484C		LFEC15E-4FN484C	
		LFEC15E-5F484C		LFEC15E-5FN484C	
		LFEC15E-3F484I		LFEC15E-3FN484I	
		LFEC15E-4F484I		LFEC15E-4FN484I	
	LFEC20E	LFEC20E-3F672C	672-fpBGA	LFEC20E-3FN672C	Pb-Free 672-fpBGA
		LFEC20E-4F672C		LFEC20E-4FN672C	
		LFEC20E-5F672C		LFEC20E-5FN672C	
		LFEC20E-3F672I		LFEC20E-3FN672I	
		LFEC20E-4F672I		LFEC20E-4FN672I	
	LFEC33E	LFEC33E-3F672C	672-fpBGA	LFEC33E-3FN672C	Pb-Free 672-fpBGA
		LFEC33E-4F672C		LFEC33E-4FN672C	
		LFEC33E-5F672C		LFEC33E-5FN672C	
		LFEC33E-3F672I		LFEC33E-3FN672I	
		LFEC33E-4F672I		LFEC33E-4FN672I	
LatticeECP™	LFECP15E	LFECP15E-3F484C	484-fpBGA	LFECP15E-3FN484C	Pb-Free 484-fpBGA
		LFECP15E-4F484C		LFECP15E-4FN484C	
		LFECP15E-5F484C		LFECP15E-5FN484C	
		LFECP15E-3F484I		LFECP15E-3FN484I	
		LFECP15E-4F484I		LFECP15E-4FN484I	
	LFECP20E	LFECP20E-3F672C	672-fpBGA	LFECP20E-3FN672C	Pb-Free 672-fpBGA
		LFECP20E-4F672C		LFECP20E-4FN672C	
		LFECP20E-5F672C		LFECP20E-5FN672C	
		LFECP20E-3F672I		LFECP20E-3FN672I	
		LFECP20E-4F672I		LFECP20E-4FN672I	
	LFECP33E	LFECP33E-3F672C	672-fpBGA	LFECP33E-3FN672C	Pb-Free 672-fpBGA
		LFECP33E-4F672C		LFECP33E-4FN672C	
		LFECP33E-5F672C		LFECP33E-5FN672C	
		LFECP33E-3F672I		LFECP33E-3FN672I	
		LFECP33E-4F672I		LFECP33E-4FN672I	
LatticeECP2™	LFE2-12E	LFE2-12E-5F484C	484-fpBGA	LFE2-12E-5FN484C	Pb-Free 484-fpBGA
		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	LFE2-12SE-5F484C	484-fpBGA	LFE2-12SE-5FN484C	Pb-Free 484-fpBGA
		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	LFE2-20E-5F484C	484-fpBGA	LFE2-20E-5FN484C	Pb-Free 484-fpBGA
		LFE2-20E-6F484C		LFE2-20E-6FN484C	
		LFE2-20E-7F484C		LFE2-20E-7FN484C	
		LFE2-20E-5F484I		LFE2-20E-5FN484I	
		LFE2-20E-6F484I		LFE2-20E-6FN484I	
	LFE2-20SE	LFE2-20SE-5F484C	484-fpBGA	LFE2-20SE-5FN484C	Pb-Free 484-fpBGA
		LFE2-20SE-6F484C		LFE2-20SE-6FN484C	
		LFE2-20SE-7F484C		LFE2-20SE-7FN484C	
		LFE2-20SE-5F484I		LFE2-20SE-5FN484I	
		LFE2-20SE-6F484I		LFE2-20SE-6FN484I	
	LFE2-35E	LFE2-35E-5F672C	672-fpBGA	LFE2-35E-5FN672C	Pb-Free 672-fpBGA
		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	LFE2-35SE-5F672C	672-fpBGA	LFE2-35SE-5FN672C	Pb-Free 672-fpBGA
		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 & reel, etc.), which are derived from any of the devices listed above.

EXHIBIT "A" – Affected Device List (Cont'd)

Product Family	Product Line	Ordering Part Number	Package	Ordering Part Number	Package
LatticeECP2 (Cont'd)	LFE2-50E	LFE2-50E-5F484C	484-fpBGA	LFE2-50E-5FN484C	Pb-Free 484-fpBGA
		LFE2-50E-6F484C		LFE2-50E-6FN484C	
		LFE2-50E-7F484C		LFE2-50E-7FN484C	
		LFE2-50E-5F484I		LFE2-50E-5FN484I	
		LFE2-50E-6F484I		LFE2-50E-6FN484I	
		LFE2-50E-5F672C	672-fpBGA	LFE2-50E-5FN672C	Pb-Free 672-fpBGA
		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	Pb-Free 484-fpBGA
			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	Pb-Free 672-fpBGA
			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	Pb-Free 672-fpBGA
			LFE2-70E-6F672C	LFE2-70E-6FN672C	
			LFE2-70E-7F672C	LFE2-70E-7FN672C	
			LFE2-70E-5F672I	LFE2-70E-5FN672I	
			LFE2-70E-6F672I	LFE2-70E-6FN672I	
	LFE2-70SE	672-fpBGA	LFE2-70SE-5F672C	LFE2-70SE-5FN672C	Pb-Free 672-fpBGA
			LFE2-70SE-6F672C	LFE2-70SE-6FN672C	
			LFE2-70SE-7F672C	LFE2-70SE-7FN672C	
LFE2-70SE-5F672I			LFE2-70SE-5FN672I		
LFE2-70SE-6F672I			LFE2-70SE-6FN672I		
LatticeECP2M™	LFE2M20E	LFE2M20E-5F484C	484-fpBGA	LFE2M20E-5FN484C	Pb-Free 484-fpBGA
		LFE2M20E-6F484C		LFE2M20E-6FN484C	
		LFE2M20E-7F484C		LFE2M20E-7FN484C	
		LFE2M20E-5F484I		LFE2M20E-5FN484I	
		LFE2M20E-6F484I		LFE2M20E-6FN484I	
	LFE2M20SE	484-fpBGA	LFE2M20SE-5F484C	LFE2M20SE-5FN484C	Pb-Free 484-fpBGA
			LFE2M20SE-6F484C	LFE2M20SE-6FN484C	
			LFE2M20SE-7F484C	LFE2M20SE-7FN484C	
			LFE2M20SE-5F484I	LFE2M20SE-5FN484I	
			LFE2M20SE-6F484I	LFE2M20SE-6FN484I	
	LFE2M35E	484-fpBGA	LFE2M35E-5F484C	LFE2M35E-5FN484C	Pb-Free 484-fpBGA
			LFE2M35E-6F484C	LFE2M35E-6FN484C	
LFE2M35E-7F484C			LFE2M35E-7FN484C		
LFE2M35E-5F484I			LFE2M35E-5FN484I		
LFE2M35E-6F484I			LFE2M35E-6FN484I		
LFE2M35SE	484-fpBGA	LFE2M35SE-5F484C	LFE2M35SE-5FN484C	Pb-Free 484-fpBGA	
		LFE2M35SE-5F484I	LFE2M35SE-5FN484I		
		LFE2M35SE-6F484C	LFE2M35SE-6FN484C		
		LFE2M35SE-6F484I	LFE2M35SE-6FN484I		
		LFE2M35SE-7F484C	LFE2M35SE-7FN484C		
LFE2M50E	484-fpBGA	LFE2M50E-5F484C	LFE2M50E-5FN484C	Pb-Free 484-fpBGA	
		LFE2M50E-6F484C	LFE2M50E-6FN484C		
		LFE2M50E-7F484C	LFE2M50E-7FN484C		
		LFE2M50E-5F484I	LFE2M50E-5FN484I		
		LFE2M50E-6F484I	LFE2M50E-6FN484I		

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc.), which are derived from any of the devices listed above.

EXHIBIT "A" – Affected Device List (Cont'd)

Product Family	Product Line	Ordering Part Number	Package	Ordering Part Number	Package
LatticeECP2M (Cont'd)	LFE2M50E (Cont'd)	LFE2M50E-5F672C	672-fpBGA	LFE2M50E-5FN672C	Pb-Free 672-fpBGA
		LFE2M50E-6F672C		LFE2M50E-6FN672C	
		LFE2M50E-7F672C		LFE2M50E-7FN672C	
		LFE2M50E-5F672I		LFE2M50E-5FN672I	
		LFE2M50E-6F672I		LFE2M50E-6FN672I	
	LFE2M50SE	LFE2M50SE-5F484C	484-fpBGA	LFE2M50SE-5FN484C	Pb-Free 484-fpBGA
		LFE2M50SE-6F484C		LFE2M50SE-6FN484C	
		LFE2M50SE-7F484C		LFE2M50SE-7FN484C	
		LFE2M50SE-5F484I		LFE2M50SE-5FN484I	
		LFE2M50SE-6F484I		LFE2M50SE-6FN484I	
		LFE2M50SE-5F672C		672-fpBGA	
	LFE2M50SE-6F672C	LFE2M50SE-6FN672C			
	LFE2M50SE-7F672C	LFE2M50SE-7FN672C			
	LFE2M50SE-5F672I	LFE2M50SE-5FN672I			
	LFE2M50SE-6F672I	LFE2M50SE-6FN672I			
	LatticeECP3™	LFE3-17EA	LFE3-17EA-6FN484C	Pb-Free 484-fpBGA	
LFE3-17EA-7FN484C					
LFE3-17EA-8FN484C					
LFE3-17EA-6FN484I					
LFE3-17EA-7FN484I					
LFE3-17EA-8FN484I					
LFE3-35EA		LFE3-35EA-6FN484C	Pb-Free 484-fpBGA		
		LFE3-35EA-7FN484C			
		LFE3-35EA-8FN484C			
		LFE3-35EA-6FN484I			
		LFE3-35EA-7FN484I			
LFE3-35EA-8FN484I					
LFE3-70EA		LFE3-70EA-6FN672C	Pb-Free 672-fpBGA		
		LFE3-70EA-7FN672C			
		LFE3-70EA-8FN672C			
		LFE3-70EA-6FN672I			
		LFE3-70EA-7FN672I			
LFE3-70EA-8FN672I					
LFE3-95EA		LFE3-95EA-6FN672C	Pb-Free 672-fpBGA		
		LFE3-95EA-7FN672C			
		LFE3-95EA-8FN672C			
		LFE3-95EA-6FN672I			
		LFE3-95EA-7FN672I			
LFE3-95EA-8FN672I					
LFE3-150EA	LFE3-150EA-6FN672C	Pb-Free 672-fpBGA			
	LFE3-150EA-7FN672C				
	LFE3-150EA-8FN672C				
	LFE3-150EA-6FN672I				
	LFE3-150EA-7FN672I				
LFE3-150EA-8FN672I					
LatticeXP™	LFXP20C	LFXP20C-3F484C	484-fpBGA	LFXP20C-3FN484C	Pb-Free 484-fpBGA
		LFXP20C-4F484C		LFXP20C-4FN484C	
		LFXP20C-5F484C		LFXP20C-5FN484C	
		LFXP20C-3F484I		LFXP20C-3FN484I	
		LFXP20C-4F484I		LFXP20C-4FN484I	
	LFXP20E	LFXP20E-3F484C	484-fpBGA	LFXP20E-3FN484C	Pb-Free 484-fpBGA
		LFXP20E-4F484C		LFXP20E-4FN484C	
		LFXP20E-5F484C		LFXP20E-5FN484C	
		LFXP20E-3F484I		LFXP20E-3FN484I	
		LFXP20E-4F484I		LFXP20E-4FN484I	

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc.), which are derived from any of the devices listed above.

EXHIBIT “A” – Affected Device List (Cont’d)

Product Family	Product Line	Ordering Part Number	Package	Ordering Part Number	Package
LatticeXP2™	LFXP2-17E	LFXP2-17E-5F484C	484-fpBGA	LFXP2-17E-5FN484C	Pb-Free 484-fpBGA
		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	LFXP2-30E-5F484C	484-fpBGA	LFXP2-30E-5FN484C	Pb-Free 484-fpBGA
		LFXP2-30E-6F484C		LFXP2-30E-6FN484C	
		LFXP2-30E-7F484C		LFXP2-30E-7FN484C	
		LFXP2-30E-5F484I		LFXP2-30E-5FN484I	
		LFXP2-30E-6F484I		LFXP2-30E-6FN484I	
		LFXP2-30E-5F672C	672-fpBGA	LFXP2-30E-5FN672C	Pb-Free 672-fpBGA
		LFXP2-30E-6F672C		LFXP2-30E-6FN672C	
	LFXP2-30E-7F672C	LFXP2-30E-7FN672C			
	LFXP2-30E-5F672I	LFXP2-30E-5FN672I			
	LFXP2-30E-6F672I	LFXP2-30E-6FN672I			
	LFXP2-40E	LFXP2-40E-5F484C	484-fpBGA	LFXP2-40E-5FN484C	Pb-Free 484-fpBGA
		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		672-fpBGA	LFXP2-40E-5FN672C	Pb-Free 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				
ispXPLD®	LC5512MV	LC5512MV-45F484C	484-fpBGA	LC5512MV-45FN484C	Pb-Free 484-fpBGA
		LC5512MV-75F484C		LC5512MV-75FN484C	
		LC5512MV-75F484I		LC5512MV-75FN484I	
	LC5768MV	LC5768MV-5F484C	484-fpBGA	LC5768MV-5FN484C	Pb-Free 484-fpBGA
		LC5768MV-75F484C		LC5768MV-75FN484C	
		LC5768MV-75F484I		LC5768MV-75FN484I	
	LC51024MV	LC51024MV-52F484C	484-fpBGA	LC51024MV-52FN484C	Pb-Free 484-fpBGA
		LC51024MV-75F484C		LC51024MV-75FN484C	
		LC51024MV-75F484I		LC51024MV-75FN484I	
		LC51024MV-52F672C	672-fpBGA	LC51024MV-52FN672C	Pb-Free 672-fpBGA
		LC51024MV-75F672C		LC51024MV-75FN672C	
		LC51024MV-75F672I		LC51024MV-75FN672I	
ispLSI® 5000VA	ispLSI 5256VA	ispLSI 5256VA-70LB272	272-BGA		
		ispLSI 5256VA-100LB272			
		ispLSI 5256VA-125LB272			
		ispLSI 5256VA-70LB272I			
	ispLSI 5384VA	ispLSI 5384VA-70LB272	272-BGA		
		ispLSI 5384VA-100LB272			
		ispLSI 5384VA-125LB272			
	ispLSI 5384VA-70LB272I				
		ispLSI 5512VA-70LB272	272-BGA		
ispLSI 5512VA-100LB272					
ispLSI 5512VA-110LB272					
ispLSI 5000VE	ispLSI 5384VE	ispLSI 5384VE-100LB272	272-BGA		
		ispLSI 5384VE-125LB272			
		ispLSI 5384VE-165LB272			
		ispLSI 5384VE-80LB272I			
		ispLSI 5384VE-100LB272I			
		ispLSI 5384VE-125LB272I			
ispMACH® 5000VG	LC51024VG	LC51024VG-5F484C	484-fpBGA		
		LC51024VG-75F484C			
		LC51024VG-10F484C			
		LC51024VG-75F484I			
		LC51024VG-10F484I			
		LC51024VG-12F484I			

Note: This PCN also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc.), which are derived from any of the devices listed above.