



September 7, 2010

**Subject: PCN# 13A-10, Notification of Intent to Discontinue Select Mature Devices**

Dear Lattice Customer,

In accordance with our Product Change Notification (PCN) policy, Lattice is providing this notification of our intent to discontinue select mature devices. One of Lattice's fabrication partners is closing one of its facilities during 2011. This fab closure will affect several select mature product families including GAL<sup>®</sup>, ispLSI<sup>®</sup> 1000, ispPAC<sup>®</sup>-POWR1208 and ispPAC-POWR1208P1 products.

As a number of these product families still enjoy moderate customer demand, our intention is to support a longer than usual Last-Time-Ship (LTS) window through the end of 2014. Our desire is to provide supplies of these products to our customers for the next four years to help minimize the customer impact.

**AFFECTED PRODUCTS**

The Ordering Part Numbers (OPNs) affected by this PCN, along with the recommended replacement alternatives, are listed in the Exhibit "A" (also available in an Excel spreadsheet [here](#)). 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 in the table.

Lattice recommends the ispMACH<sup>®</sup> 4000V products as replacements for the GAL devices; however, they are not voltage compatible and require a 3.3V power supply. For a 5V core voltage compatible alternative, the mature ispMACH<sup>®</sup> 4A5 devices can be used.

For additional information on replacing the ispPAC-POWR1208/P1 devices, please refer to Product Bulletin #1346, available [here](#).

**DISCONTINUANCE TIMING**

Customers will have 6 months to place a last time buy (LTB) order for these devices. All LTB orders for these devices will be non-cancelable and non-returnable. All LTB orders must be placed no later than March 7, 2011 (6 months after the date of this notice); however, Lattice is willing to schedule and ship LTB orders over a four year time period. Orders placed by March 7, 2011 will be supported at the current price for shipments through the end of 2014. Lattice will use commercially reasonable efforts to accept orders received after March 7, 2011; however, Lattice does not guarantee that orders received after March 7, 2011 can be accepted.

## **DISCONTINUANCE TIMING - SUMMARY**

- **Last Time Buy Order Date:** **March 7, 2011**
- **Last Shipment Date:** **December 31, 2014**

## **RESPONSE**

In accordance with JESD46-C, this change is deemed accepted by the customer if no acknowledgement is received within 30 days from this Notice.

**Note:** Be sure to sign up for PCN "Web Alerts" (See [PCN#13A-09](#) for details) and receive all future Lattice PCNs via e-mail!

## **CONTACT**

If you have any questions or require additional information, please contact [pcn@latticesemi.com](mailto:pcn@latticesemi.com).

Sincerely,

Lattice Semiconductor PCN Administration

### EXHIBIT A – Discontinued Device and Recommended Alternative List

Discontinued Device			Recommended Replacement Alternatives						
Product Line	Ordering Part Number	Package Type	Option #1		Option #2				
			Ordering Part Number	Package Type	Ordering Part Number	Package Type			
GAL16V8D	GAL16V8D-7LP	20-PDIP	LC4032V-75T48C	48-TQFP	M4A5-32/32-7VC48	48-TQFP			
	GAL16V8D-10LP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-15LP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-25LP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-10LPI		LC4032V-75T48I		M4A5-32/32-10VI48				
	GAL16V8D-15LPI		LC4032V-75T48I		M4A5-32/32-12VI48				
	GAL16V8D-25LPI		LC4032V-75T48I		M4A5-32/32-12VI48				
	GAL16V8D-10QP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-15QP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-25QP		LC4032V-75T48C		M4A5-32/32-10VC48				
	GAL16V8D-20QPI		LC4032V-75T48I		M4A5-32/32-12VI48				
	GAL16V8D-25QPI		LC4032V-75T48I		M4A5-32/32-12VI48				
	GAL16V8D-7LPN		Pb-Free 20-PDIP		LC4032V-75TN48C		Pb-Free 48-TQFP	M4A5-32/32-7NVC48	Pb-Free 48-TQFP
	GAL16V8D-10LPN				LC4032V-75TN48C			M4A5-32/32-10VNC48	
	GAL16V8D-15LPN				LC4032V-75TN48C			M4A5-32/32-10VNC48	
	GAL16V8D-25LPN				LC4032V-75TN48C			M4A5-32/32-10VNC48	
	GAL16V8D-10LPNI				LC4032V-75TN48I			M4A5-32/32-10VNI48	
	GAL16V8D-15LPNI				LC4032V-75TN48I			M4A5-32/32-12VNI48	
	GAL16V8D-25LPNI				LC4032V-75TN48I			M4A5-32/32-12VNI48	
	GAL16V8D-10QPN				LC4032V-75TN48C			M4A5-32/32-10VNC48	
	GAL16V8D-15QPN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-25QPN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-20QPNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL16V8D-25QPNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL16V8D-5LJ	20-PLCC		LC4032V-5T48C	48-TQFP	M4A5-32/32-5VC48		48-TQFP	
	GAL16V8D-7LJ			LC4032V-75T48C		M4A5-32/32-7VC48			
	GAL16V8D-10LJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-15LJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-25LJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-10LJI		LC4032V-75T48I	M4A5-32/32-10VI48					
	GAL16V8D-15LJI		LC4032V-75T48I	M4A5-32/32-12VI48					
	GAL16V8D-25LJI		LC4032V-75T48I	M4A5-32/32-12VI48					
	GAL16V8D-10QJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-15QJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-25QJ		LC4032V-75T48C	M4A5-32/32-10VC48					
	GAL16V8D-20QJI		LC4032V-75T48I	M4A5-32/32-12VI48					
	GAL16V8D-25QJI		LC4032V-75T48I	M4A5-32/32-12VI48					
	GAL16V8D-5LJN		Pb-Free 20-PLCC	LC4032V-5TN48C		Pb-Free 48-TQFP	M4A5-32/32-5VNC48		Pb-Free 48-TQFP
	GAL16V8D-7LJN			LC4032V-75TN48C			M4A5-32/32-7VNC48		
	GAL16V8D-10LJN			LC4032V-75TN48C			M4A5-32/32-10VNC48		
	GAL16V8D-15LJN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-25LJN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-10LJNI	LC4032V-75TN48I		M4A5-32/32-10VNI48					
	GAL16V8D-15LJNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL16V8D-25LJNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL16V8D-10QJN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-15QJN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-25QJN	LC4032V-75TN48C		M4A5-32/32-10VNC48					
	GAL16V8D-20QJNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL16V8D-25QJNI	LC4032V-75TN48I		M4A5-32/32-12VNI48					
	GAL18V10B	GAL18V10B-10LP		20-PDIP	LC4032V-75T48C		48-TQFP	M4A5-32/32-10VC48	
		GAL18V10B-15LP	LC4032V-75T48C		M4A5-32/32-10VC48				
		GAL18V10B-20LP	LC4032V-75T48C		M4A5-32/32-10VC48				
		GAL18V10B-10LJ	20-PLCC	LC4032V-75T48C	M4A5-32/32-10VC48				
		GAL18V10B-15LJ		LC4032V-75T48C	M4A5-32/32-10VC48				
		GAL18V10B-20LJ		LC4032V-75T48C	M4A5-32/32-10VC48				
	GAL20V8B	GAL20V8B-15LP	24-PDIP	LC4032V-75T48C	48-TQFP	M4A5-32/32-10VC48	48-TQFP		
		GAL20V8B-25LP		LC4032V-75T48C		M4A5-32/32-10VC48			
		GAL20V8B-25LPI		LC4032V-75T48I		M4A5-32/32-12VI48			
		GAL20V8B-15QP		LC4032V-75T48C		M4A5-32/32-10VC48			
GAL20V8B-25QP		LC4032V-75T48C		M4A5-32/32-10VC48					
GAL20V8B-25QPI		LC4032V-75T48I		M4A5-32/32-12VI48					
GAL20V8B-15LPN		Pb-Free 24-PDIP	LC4032V-75TN48C	Pb-Free 48-TQFP	M4A5-32/32-10VNC48	Pb-Free 48-TQFP			
GAL20V8B-25LPN			LC4032V-75TN48C		M4A5-32/32-10VNC48				
GAL20V8B-25LPNI			LC4032V-75TN48I		M4A5-32/32-12VNI48				
GAL20V8B-15QPN			LC4032V-75TN48C		M4A5-32/32-10VNC48				
GAL20V8B-25QPN			LC4032V-75TN48C		M4A5-32/32-10VNC48				
GAL20V8B-25QPNI			LC4032V-75TN48I		M4A5-32/32-12VNI48				
GAL20V8B-15LJ		28-PLCC	LC4032V-75T48C	48-TQFP	M4A5-32/32-10VC48	48-TQFP			
GAL20V8B-25LJ			LC4032V-75T48C		M4A5-32/32-10VC48				
GAL20V8B-25LJI			LC4032V-75T48I		M4A5-32/32-12VI48				
GAL20V8B-15QJ			LC4032V-75T48C		M4A5-32/32-10VC48				
GAL20V8B-25QJ			LC4032V-75T48C		M4A5-32/32-10VC48				
GAL20V8B-25QJI			LC4032V-75T48I		M4A5-32/32-12VI48				
GAL20V8B-15LJN		Pb-Free 28-PLCC	LC4032V-75TN48C	Pb-Free 48-TQFP	M4A5-32/32-10VNC48	Pb-Free 48-TQFP			
GAL20V8B-25LJN			LC4032V-75TN48C		M4A5-32/32-10VNC48				
GAL20V8B-25LJNI			LC4032V-75TN48I		M4A5-32/32-12VNI48				
GAL20V8B-15QJN			LC4032V-75TN48C		M4A5-32/32-10VNC48				
GAL20V8B-25QJN	LC4032V-75TN48C		M4A5-32/32-10VNC48						
GAL20V8B-25QJNI	LC4032V-75TN48I		M4A5-32/32-12VNI48						

**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.

**EXHIBIT A – Discontinued Device and Recommended Alternative List(Cont'd)**

Discontinued Device			Recommended Replacement Alternatives			
Product Line	Ordering Part Number	Package Type	Option #1		Option #2	
			Ordering Part Number	Package Type	Ordering Part Number	Package Type
GAL20V8C	GAL20V8C-7LJ	28-PLCC	LC4032V-75T48C	48-TQFP	M4A5-32/32-7VC48	48-TQFP
	GAL20V8C-10LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL20V8C-10LJI	Pb-Free 28-PLCC	LC4032V-75T48I	Pb-Free 48-TQFP	M4A5-32/32-10VI48	Pb-Free 48-TQFP
	GAL20V8C-7LJN		LC4032V-75TN48C		M4A5-32/32-7VNC48	
	GAL20V8C-10LJN		LC4032V-75TN48C		M4A5-32/32-10VNC48	
GAL20V8C-10LJNI	LC4032V-75TN48I	M4A5-32/32-10VNI48				
GAL22V10D	GAL22V10D-10LP	24-PDIP	LC4032V-75T48C	48-TQFP	M4A5-32/32-10VC48	48-TQFP
	GAL22V10D-15LP		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-25LP		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-10LPI		LC4032V-75T48I		M4A5-32/32-10VI48	
	GAL22V10D-15LPI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-20LPI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-25LPI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-10QPP		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-15QPP		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-25QPP		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-10LPN		LC4032V-75TN48C		M4A5-32/32-10VNC48	
	GAL22V10D-15LPN		LC4032V-75TN48C		M4A5-32/32-10VNC48	
	GAL22V10D-25LPN	LC4032V-75TN48C	M4A5-32/32-10VNC48			
	GAL22V10D-10LPNI	LC4032V-75TN48I	M4A5-32/32-10VNI48			
	GAL22V10D-15LPNI	LC4032V-75TN48I	M4A5-32/32-12VNI48			
	GAL22V10D-20LPNI	LC4032V-75TN48I	M4A5-32/32-12VNI48			
	GAL22V10D-25LPNI	LC4032V-75TN48I	M4A5-32/32-12VNI48			
	GAL22V10D-10QPN	LC4032V-75TN48C	M4A5-32/32-10VNC48			
	GAL22V10D-15QPN	LC4032V-75TN48C	M4A5-32/32-10VNC48			
	GAL22V10D-25QPN	LC4032V-75TN48C	M4A5-32/32-10VNC48			
	GAL22V10D-5LJ	28-PLCC	LC4032V-5T48C	48-TQFP	M4A5-32/32-5VC48	48-TQFP
	GAL22V10D-7LJ		LC4032V-75T48C		M4A5-32/32-7VC48	
	GAL22V10D-10LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-15LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-25LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-15LJI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-20LJI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-25LJI		LC4032V-75T48I		M4A5-32/32-12VI48	
	GAL22V10D-10QJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-15QJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-25QJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL22V10D-5LJN		Pb-Free 28-PLCC		LC4032V-5TN48C	
	GAL22V10D-7LJN	LC4032V-75TN48C		M4A5-32/32-7VNC48		
	GAL22V10D-10LJN	LC4032V-75TN48C		M4A5-32/32-10VNC48		
	GAL22V10D-15LJN	LC4032V-75TN48C		M4A5-32/32-10VNC48		
	GAL22V10D-25LJN	LC4032V-75TN48C		M4A5-32/32-10VNC48		
GAL22V10D-15LJNI	LC4032V-75TN48I	M4A5-32/32-12VNI48				
GAL22V10D-20LJNI	LC4032V-75TN48I	M4A5-32/32-12VNI48				
GAL22V10D-25LJNI	LC4032V-75TN48I	M4A5-32/32-12VNI48				
GAL22V10D-10QJN	LC4032V-75TN48C	M4A5-32/32-10VNC48				
GAL22V10D-15QJN	LC4032V-75TN48C	M4A5-32/32-10VNC48				
GAL22V10D-25QJN	LC4032V-75TN48C	M4A5-32/32-10VNC48				
GAL26CV12B	GAL26CV12B-10LJ	28-PLCC		LC4032V-75T48C	48-TQFP	M4A5-32/32-10VC48
	GAL26CV12B-15LJ		LC4032V-75T48C	M4A5-32/32-10VC48		
	GAL26CV12B-20LJ		LC4032V-75T48C	M4A5-32/32-10VC48		
	GAL26CV12B-15LJI		LC4032V-75T48I	M4A5-32/32-12VI48		
	GAL26CV12B-20LJI		LC4032V-75T48I	M4A5-32/32-12VI48		
GAL26CV12C	GAL26CV12C-7LJ	28-PLCC	LC4032V-75T48C	48-TQFP	M4A5-32/32-7VC48	48-TQFP
	GAL26CV12C-10LJ		LC4032V-75T48I		M4A5-32/32-10VC48	
GAL26V12C	GAL26V12C-7LJ	28-PLCC	LC4032V-75T48C	48-TQFP	M4A5-32/32-7VC48	48-TQFP
	GAL26V12C-10LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL26V12C-15LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL26V12C-20LJ		LC4032V-75T48C		M4A5-32/32-10VC48	
	GAL26V12C-10LJI		LC4032V-75T48I		M4A5-32/32-10VI48	
	GAL26V12C-15LJI		LC4032V-75T48I		M4A5-32/32-12VI48	
ispLSI 1016	ispLSI 1016-60LJ	44-PLCC	LC4064V-75T48C	48-TQFP	ispLSI 1016EA-100LJ44	44-PLCC
	ispLSI 1016-80LJ		LC4064V-75T48C		ispLSI 1016EA-100LJ44	
	ispLSI 1016-90LJ		LC4064V-75T48C		ispLSI 1016EA-100LJ44	
	ispLSI 1016-110LJ	44-TQFP	LC4064V-75T48C	48-TQFP	ispLSI 1016EA-100LJ44	44-TQFP
	ispLSI 1016-60LJI		LC4064V-75T48I		ispLSI 1016EA-100LJ44	
	ispLSI 1016-60LT44		LC4064V-75T48C		ispLSI 1016EA-100LT44	
	ispLSI 1016-80LT44		LC4064V-75T48C		ispLSI 1016EA-100LT44	
ispLSI 1032	ispLSI 1032-60LT	100-TQFP	LC4128V-75T100C	100-TQFP	ispLSI 1032EA-100LT100	100-TQFP
	ispLSI 1032-80LT		LC4128V-75T100C		ispLSI 1032EA-100LT100	
	ispLSI 1032-90LT		LC4128V-75T100C		ispLSI 1032EA-100LT100	
	ispLSI 1032-60LTI		LC4128V-75T100I		ispLSI 1032EA-100LT100	
	ispLSI 1032-60LJ	84-PLCC	LC4128V-75T100C	100-TQFP	ispLSI 1032EA-100LT100	100-TQFP
	ispLSI 1032-80LJ		LC4128V-75T100C		ispLSI 1032EA-100LT100	
	ispLSI 1032-90LJ		LC4128V-75T100C		ispLSI 1032EA-100LT100	
	ispLSI 1032-60LJI		LC4128V-75T100I		ispLSI 1032EA-100LT100	

**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.

**EXHIBIT A – Discontinued Device and Recommended Alternative List (Cont'd)**

Discontinued Device			Recommended Replacement Alternatives			
Product Line	Ordering Part Number	Package Type	Option #1		Option #2	
			Ordering Part Number	Package Type	Ordering Part Number	Package Type
ispLSI 1048	ispLSI 1048-50LQ	120-PQFP	LC4256V-75T144C	144-TQFP	ispLSI 1048EA-100LQ128	128-PQFP
	ispLSI 1048-70LQ		LC4256V-75T144C		ispLSI 1048EA-100LQ128	
	ispLSI 1048-80LQ		LC4256V-75T144C		ispLSI 1048EA-100LQ128	
	ispLSI 1048-50LQI		LC4256V-75T144I		ispLSI 1048EA-100LQ128	
ispLSI 1048C	ispLSI 1048C-50LQ	128-PQFP	LC4256V-75T144C	144-TQFP	ispLSI 1048EA-100LQ128	128-PQFP
	ispLSI 1048C-70LQ		LC4256V-75T144C		ispLSI 1048EA-100LQ128	
	ispLSI 1048C-50LQI		LC4256V-75T144I		ispLSI 1048EA-100LQ128	
ispPAC-POWR1208	ispPAC-POWR1208-01T44I	44-TQFP	ispPAC-POWR1014-01T48I	48-TQFP	ispPAC-POWR1014A-01T48I	48-TQFP
	ispPAC-POWR1208-01T44E	Pb-Free	ispPAC-POWR1014-01T48I	Pb-Free	ispPAC-POWR1014A-01T48I	Pb-Free
	ispPAC-POWR1208-01TN44I		ispPAC-POWR1014-01TN48I		ispPAC-POWR1014A-01TN48I	
	ispPAC-POWR1208-01TN44E	44-TQFP	ispPAC-POWR1014-01TN48I	48-TQFP	ispPAC-POWR1014A-01TN48I	48-TQFP
ispPAC-POWR1208P1	ispPAC-POWR1208P1-01T44I	44-TQFP	ispPAC-POWR1014-01T48I	48-TQFP	ispPAC-POWR1014A-01T48I	48-TQFP
	ispPAC-POWR1208P1-01TN44I	Pb-Free 44-TQFP	ispPAC-POWR1014-01TN48I	Pb-Free 48-TQFP	ispPAC-POWR1014A-01TN48I	Pb-Free 48-TQFP

**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.