

## LatticeECP3-70E & LatticeECP3-95E Errata

LatticeECP3™-70E and LatticeECP3-95E devices have the following known discrepancies from the Advance Data Sheet specifications. Lattice has the intent to resolve these discrepancies; however, there can be no assurance that these discrepancies will be resolved in current or future products. If a workaround exists, it will be noted below the errata.

### Device Discrepancies from Data Sheet:

#### Programming:

- 1) Programming modes are restricted to non-compressed and non-encrypted bit streams.
- 2) SSPI (Slave SPI) programming mode is not supported.

#### SERDES:

- 3) The SERDES Loss of Signal indicator available in SERDES PCS does not meet PCIe spec when used with the Lattice PCIe IP. The range of minimum and maximum voltages for the SERDES Loss of Signal (LOS) circuitry used for PCI Express 1.1 electrical idle detection is outside the specification limits as listed in the table below.

Parameter	Spec	Errata	Units
Maximum Electrical Idle Detect Threshold	175	320	mV diff P-P

#### Workaround:

For this errata to be realized would require more than 8dB of DC attenuation which is highly unlikely in current PCIe systems. A workaround does exist where the LOS can be detected through the Lattice PCIe IP. Contact Lattice for Lattice PCIe IP support or additional details.

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4) **SERDES HDIN P and HDIN N pins do not meet ESD specifications of 500V. The current device passes CDM testing at 300V, fails at 400V.**

**Other:**

5) **The primary clock tree operating frequency is limited to 320Mhz.**

6) **PLL ECLK  $f_{IN}$  maximum frequency is limited to 450Mhz.**

7) **DDR3 memory interfaces are currently not supported. Please contact your local Lattice technical field representative to understand options for implementing high speed memory interfaces for this version of devices, and upcoming devices.**

8) **When using the Dual-Boot or Multi-Boot configuration, the Master Clock frequency must be set to the default of 2.5Mhz.**

<b>Date</b>	<b>Version</b>	<b>Description of Revisions</b>
02/20/09		Initial release
03/10/09	1.1	Added item #7, regarding DDR3 memory support
04/13/09	1.2	Added item #8, regarding Dual Boot and Multi-Boot frequency