

Lattice USB Type-C™ Solutions

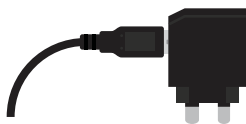
Fast. Efficient. Flexible.



- Up to **100 W** of smart charging
- Over **10Gbps** for faster downloads
- **Reversible** connector
- **Flexible** modes for video
- **Flexible** vendor defined messaging (VDM)

Typical USB Type-C Applications

Chargers



Phones, Tablets, Notebooks



Peripherals



The Lattice Value Proposition

Fast Design

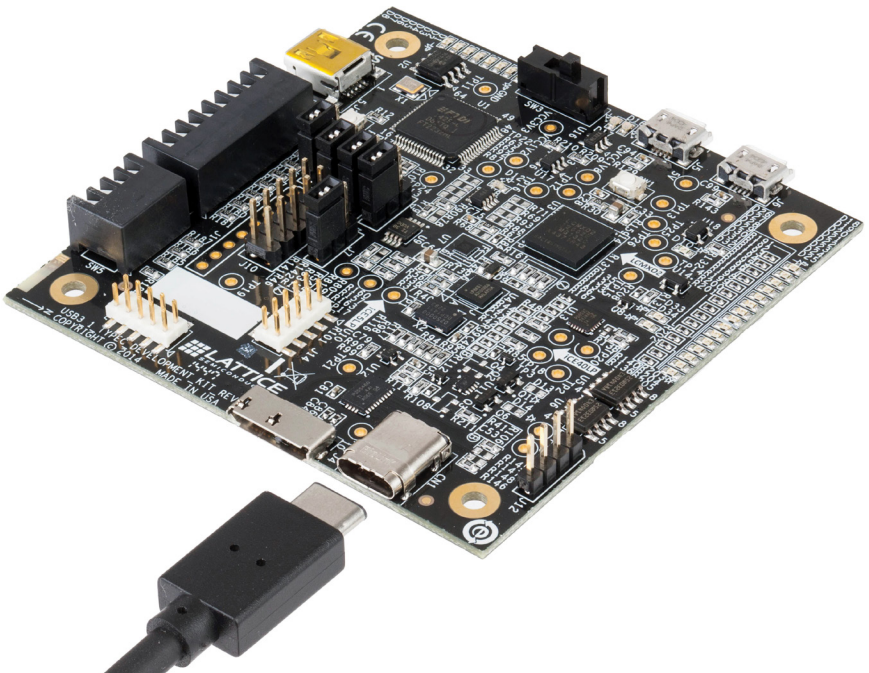
- Schematics and BOMs
- Source code
- Development kits
- Global technical support

Efficient Design

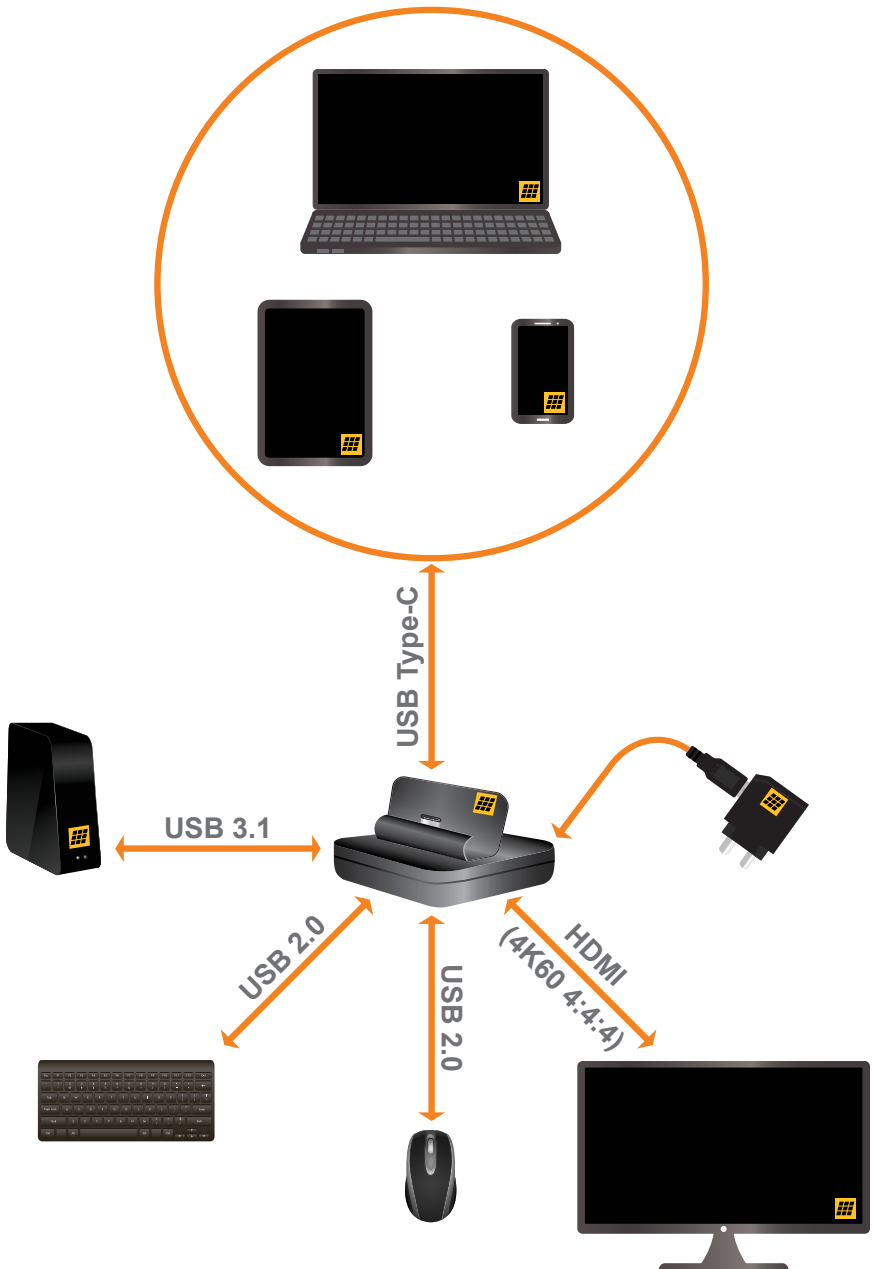
- Low-cost CC/PD PHY options
- Integrated switch for USB 3.1 (Gen 1) & video
- Low standby power (Sub 150 μ W)
- Small footprint (No additional CC components)

Flexible Design

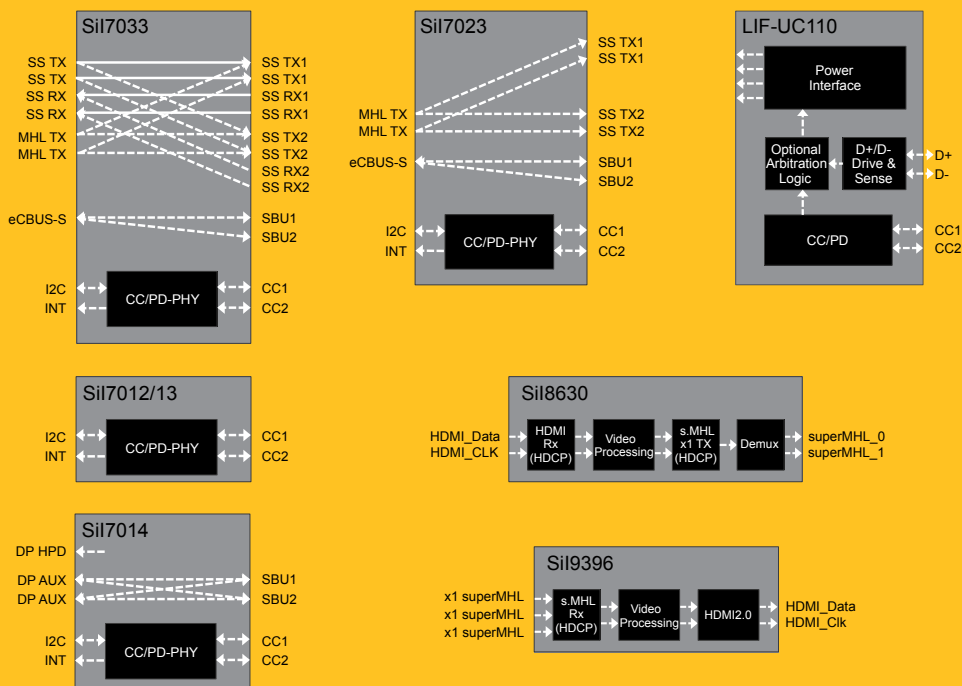
- CC/PD full stack and PHY-only options
- Comprehensive Alt Mode & VDM support
- Customizable power electronics interface
- Additional power negotiations supported



Lattice in Action



Technical Details and Part Selector Guide



Part	SiI7012	SiI7013	SiI7014	SiI7023	SiI7033	UC110	UC140	SiI8630	SiI9396
Function	CC/PD PHY	CC/PD PHY	CC/PD PHY	CC/PD PHY	CC/PD PHY	CC/PD Full Stack	CC/PD Full Stack	superMHL Tx	superMHL Rx
SS Switch	—	—	—	—	USB 3.1 (Gen 1)	—	—	—	—
Video Switch	—	—	DP-AUX	MHL	MHL	—	—	MHL	—
Package	CSP16 1.9x1.9mm	QFN24 3x3mm	QFN24 3x3mm	QFN24 3x3mm	BGA36 3x3mm	QFN48 7x7mm	BGA81 4x4mm	BGA64 4x4mm	QFN76 9x9mm
Compliance	USB Type-C v1.1	USB Type-C v1.1	USB Type-C v1.1	USB Type-C v1.1	USB Type-C v1.1	USB Type-C v1.1	USB Type-C v1.1	superMHL 1.0 and HDMI 2.0	superMHL 1.0 and HDMI 2.0

Applications Support
www.latticesemi.com/support



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