

This document lists the Cyclone[®] V device family features that will be supported in the future in comparison with the currently support features in the Quartus[®] II software version 13.1.

Device Support

Table 1 lists the software support for each device variant.

Table 1. Device Support for Cyclone V Devices

Device Variant	Software Support
Cyclone V E	Selected Cyclone V devices are supported in the Quartus II software version 13.1.
Cyclone V GX	
Cyclone V GT	
Cyclone V SE	
Cyclone V SX	
Cyclone V ST	

Features Support

Table 2 lists the transceiver physical coding sublayer (PCS) features.

Table 2. Transceiver PCS Support for Cyclone V Devices

Feature	Current Support	Future Support
PCI Express [®] (PCIe [®])	PCIe Gen1 and Gen2 x2 mode (for Cyclone V GX and GT devices)	PCIe Gen1 and Gen2 x2 mode (for Cyclone V SE, SX, and ST devices)
Custom PHY	Custom modes (for Cyclone V GX and GT devices)	Custom modes (for Cyclone V SE, SX, and ST devices)

Table 3 lists the transceiver clocking features.

Table 3. Transceiver Clocking Support for Cyclone V Devices

Feature	Current Support	Future Support
PLL cascading	Support for Cyclone V GX, GT, SE, SX, and ST devices: <ul style="list-style-type: none"> ■ Memory Initialization File (.mif) streaming reconfiguration ■ Negative phase shift ■ PMA clock output (fPLL as transmit PLL) ■ Reconfiguration of counter (M, N, C) parameters ■ fPLL to fPLL cascading (direct path) ■ Reference clock switchover 	Output counter cascading (for Cyclone V GX, GT, SE, SX, and ST devices)

Table 4 lists the transceiver dynamic reconfiguration features.

Table 4. Transceiver Dynamic Reconfiguration Support for Cyclone V Devices

Feature	Current Support	Future Support
Dynamic reconfiguration	Support for Cyclone V GX and GT devices: <ul style="list-style-type: none"> ■ Channel reconfiguration ■ Reference clock switching (.mif support) ■ Transmit PLL reconfiguration (.mif support) ■ Transmit PLL switching (.mif support) 	Analog settings reconfiguration (for Cyclone V SE, SX, and ST devices)

Document Revision History

Table 5 lists the revision history for this document.

Table 5. Document Revision History (Part 1 of 2)

Date	Version	Changes
January 2014	1.5	Removed the following tables: <ul style="list-style-type: none"> ■ External Memory Support for Cyclone V Devices ■ SoC HMC Support for Cyclone V Devices.
May 2013	1.4	<ul style="list-style-type: none"> ■ Updated Table 1, Table 2, Table 3, Table 4, Table 5, and Table 6. ■ Removed the following tables: <ul style="list-style-type: none"> ■ Configuration Support for Cyclone V Devices ■ FPGA Fabric Support for Cyclone V Devices
November 2012	1.3	<ul style="list-style-type: none"> ■ Added Table 5. ■ Updated Table 1, Table 2, Table 3, Table 4, Table 6, Table 7, and Table 8.
June 2012	1.2	Updated Table 1, Table 3, Table 4, Table 5, Table 6, and Table 7.

Table 5. Document Revision History (Part 2 of 2)

Date	Version	Changes
November 2011	1.1	Updated Table 5.
November 2011	1.0	Initial release.

