



Protocol	Line/Lane Rate (Gbps)	Altera FPGA Family	XO Clock Generation	VCXO Clock Generation	Clock Generation	Jitter Attenuators	Clock Distribution	Network Synchronization
<b>Video</b>								
SDI 3G/HD/SD	0.27, 1.485, 2.970	Stratix, Arria, Cyclone	8N3Qxxx 8N4Qxxx XUxxxx XLxxxx	8N3QVxxx 8N4QVxxx	5P49V5901 8T49N28x 8T49N00x	8T49N28x 813Nxxx	8P34Sxxxx 8SLVPxxxx 8SLVDxxxx 8T39Sxx	82P33810/814/831
DisplayPort	1.62, 2.7, 5.4, 8.1							
HDMI/DVI	1.65, 3.4, 6							
<b>Communication</b>								
1 GbE	1.25	Stratix, Arria, Cyclone			5P49V5901, 8T49N00x, 8T49N28X		830x 8L3010	82P33710/714
10GbE XAU1	3.125				Lower Power: 5P49V5901 Higher Performance: 8T49N28x, 8T49N00x, 8V19N407-XX, 8T49NS010			
10GbE XFI	10.3125	Stratix, Arria	8N3Qxxx 8N4Qxxx XUxxxx XLxxxx	8N3QVxxx 8N4QVxxx	Lower Power: 5P49V5901 Higher Performance: 8T49N28x, 8T49N00x, 8V19N407-XX, 8T49NS010	8T49N28x 813Nxxx 82P33714/731	8P34Sxxxx 8SLVPxxxx 8SLVDxxxx 8T39Sxx	82P33731
40GbE 100GbE	10.3125				8T49N28x, 8V19N407-XX, 8T49NS010, 8T49N012			
PCIe® Gen1 / Gen2	2.5, 5.0	Stratix, Arria, Cyclone			5V4123x, 9FGUxxx 9FGVxxxx, 9FGLxxxx 8T49N00x, 8T49N028 8T49N012, 841S10x		8510x 8T39S10	—
PCIe Gen3	8	Stratix, Arria						—
Serial RapidIO®	1.25, 2.5, 3.125, 5, 6.25	Stratix, Arria, Cyclone			5P49V5901, 8T49N28x, 8T49N00x, 841N254		8P34Sxxxx 8SLVPxxxx 8SLVDxxxx 8T39Sxx	—
JESD204B	3.125, 6.375, 12.5				8V19N4xx, 8V79S690		8V79S690 8V79S680	—
<b>Storage</b>								
Fibre Channel	1.0625, 2.125, 4.25, 8.5, 10.52, 14.025	Stratix, Arria	8N3Qxxx 8N4Qxxx XUxxxx XLxxxx	8N3QVxxx 8N4QVxxx	5P49V5901 8T49N28x 8T49N00x	8T49N28x 813Nxxx	8P34Sxxxx 8SLVPxxxx 8SLVDxxxx 8T39Sxx	—
SAS 12G	1.5, 3.0, 6.0, 12.0							
SAS / SATA	1.5, 3.0, 6.0	Stratix, Arria, Cyclone						
<b>WAN</b>								
SONET / OC-3 / OC-12 / OC-48	.155, .622, 2.488	Stratix, Arria	8N3Qxxx 8N4Qxxx XUxxxx XLxxxx	8N3QVxxx 8N4QVxxx	5P49V5901 8T49N28x 8T49N00x	8T49N28x 8V19N407-XX	8P34Sxxxx 8SLVPxxxx 8SLVDxxxx 8T39Sxx	82P33710/714/731
SONET / OC-192	155.52, 622							82P33710/714/731
OTN / OTU-2	10.709							—
OTN / OTU-3 / OTU-4	43.018, 112							—
CPRI	0.6144, 1.2288, 2.4876, 3.072, 4.9152, 6.144, 9.8304							82P33731