

SPECIFICATIONS AND ORDERING INFORMATION

Specifications

Generator Data Out

Bit Rate	622 Mb/s to 6 Gb/s
Data Format	NRZ, normal or inverted
Rise/Fall Time (20–80%)	34 psec typical
Programmable Rise/Fall Time	Yes
Max. Rise/Fall Time Mismatch	0.05 UI
Differential Amplitude Range	50 mV to 1.8V, 5 mV steps
Voltage Offset	-2 V to +2.5 V
Maximum AC	
Common Mode Voltage	20 mV
Maximum Intrinsic Jitter	< 20 psec typical
Tri-state Outputs	Yes
Electrical Idle Generation	Yes
SSC Support	Yes
Pre/De-emphasis Support	Yes
Return Loss SDD11 and S11	< -10 dB over entire frequency range

Generator Clock Out

Frequency Range	100 MHz to 6 GHz
Rise/Fall Time (20–80%)	34 psec typical
Voltage Rails	AC coupled
Jitter	1 psec RMS typical
Amplitude Range	CML
Sub-rate Clock	Divide by 1, or divide by any number between 8 and 511 (and multiplied by 1, 2, 4, or 8)
Jitter Stress	Yes

Ordering Information

Product Description	Product Code
PeRT³ Hardware Platforms	
Eagle PeRT ³ System - 1 Channel	PER-R006-S01-X
Eagle PeRT ³ System - 2 Channel	PER-R006-S02-X
Eagle PeRT ³ System - 4 Channel	PER-R006-S04-X

Protocols Supported

PCI Express	2.5 and 5 Gb/s
SAS	1.5, 3 and 6 Gb/s
SATA	1.5, 3 and 6 Gb/s
USB 3.0	5 Gb/s



Generator Jitter Stress

1.5 MHz – 100 MHz RMS Jitter	17 psec
10 KHz – 1.5 MHz RMS Jitter	17 psec
1.5 MHz – 100 MHz Dj P-P	240 psec
10 KHz – 1.5 MHz Dj P-P	240 psec
Periodic Jitter	Integrated and Calibrated
Sinusoidal Jitter	Integrated and Calibrated
Random Jitter	Integrated and Calibrated
Sine Interference	Integrated and Calibrated
Total Jitter	> 1 UI at high frequency, 10s of UIs at low frequency
External Jitter Injection	Yes

Error Detector Data In

Differential Amplitude Range	75 mV to 1.8 V
Format	NRZ

Product Description	Product Code
Eagle Test Suite Options	
Eagle Jitter Tolerance Test Suite	PER-R006-008-A
Eagle SAS Receiver Test Suite	SAS-R006-004-A
Eagle SATA Receiver Test Suite	SAT-R006-004-A
Eagle PCI Express Receiver Test Suite	PCI-R006-008-A
Eagle USB 3.0 Receiver Test Suite	USB-R006-001-A