

万斯特测控

PXI-3178V

18 槽PXI机箱

技术规格书

万斯特PXI-3178V 技术规格书

万斯特 PXI-3178V是同时具备高性能和高性价比的 18 槽PXI 机箱，最大系统带宽可达 8 GB/s，单槽功率可达 58 W，工作温度 0 °C至55 °C。

主要特点:

- 高速数据吞吐能力
- 高精度时钟和低时钟抖动
- 低功率纹波噪声

技术指标:

槽位数量: 1 个系统槽, 17 个扩展槽

最大系统带宽: 8 GB/s (PCIe Gen2 x16)

最大单槽带宽: 4 GB/s (PCIe Gen2 x8)

风扇控制: 支持自动

智能监测: 支持机箱状态监测

Basic

Slot Count	18
Maximum slot bandwidth	4 GB/s (PCIe Gen2 x4 or x8)
Maximum system bandwidth	8 GB/s (PCIe Gen2 x16)
Chassis Power Supply Type	AC
Slot Cooling Capacity	58 W (0°C ~ 40°C) 38W (0°C ~ 55°C)
Onboard Clock Type	VCXO
External Clocking	Yes
Number of hybrid slots	17
Number of PXIe slots	0
Number of PXI slots	0
System timing slot	No
External Trigger Access	No
Redundant HW	No

Electrical**AC Input**

Total Chassis Power	1300 W
Input voltage range	100 to 240 VAC
Input frequency	50/60 Hz
Input current rating	12-6 A
Efficiency	91%

DC Output

Total Available Power	1170W (0°C ~ 45°C , 220VAC) 990W (45°C ~ 55°C , 220VAC)
+3.3 V	77 A
+5 V	53 A
+12 V	72 A
-12 V	4 A
5 Vaux	4 A
+3.3V Load Regulation	5%
+5V Load Regulation	5%
+12V Load Regulation	5%
-12V Load Regulation	5%
5Vaux Load Regulation	5%
+3.3V Maximum Ripple and Noise	39 mVpp
+5V Maximum Ripple and Noise	19 mVpp
+12V Maximum Ripple and Noise	15 mVpp
-12V Maximum Ripple and Noise	4 mVpp
5Vaux Maximum Ripple and Noise	4 mVpp

Maximum power dissipation

System Controller Slot	140W
Hybrid Peripheral Slot	58W

System Controller Slot Current Capacity

+3.3 V	15 A
+5 V	15 A
+12 V	30 A
5 Vaux	3 A

Hybrid Peripheral Slot with PXI-5 Peripheral Slot Current Capacity

+3.3 V	9 A
+12 V	6 A
5 Vaux	1 A

Hybrid Peripheral Slot with PXI-1 Peripheral Slot Current Capacity

+3.3 V	6 A
+5 V	6 A
+12 V	1 A
-12 V	1 A
V (I/O)	11 A

System Synchronization Clock

PXI_CLK10

Maximum slot-to-slot skew	160 ps
Accuracy	±15 ppm max
Maximum jitter	3.5 ps RMS phase-jitter (10 Hz–1 MHz range)
Duty-factor	45%–55%
Unloaded signal swing	3.3 V ±0.3 V

PXIe_CLK100

Maximum slot-to-slot skew	125 ps
Accuracy	±15 ppm max
Maximum jitter	1.7 ps RMS phase-jitter (12 kHz–20 MHz range)
Duty-factor	45%–55%
Absolute differential voltage	400–1000 mV

PXIe_SYNC100

Maximum slot-to-slot skew	125 ps
Accuracy	±15 ppm max
Maximum jitter	3.6 ps RMS phase-jitter (12 kHz–20 MHz range)
Duty-factor	45%–55%
Absolute differential voltage	400–1000 mV

External 10 MHz Reference Output (SMA connector)

Maximum jitter	3.3 ps RMS phase-jitter (10 Hz–1 MHz range)
Output amplitude	1 VPP ±20% square-wave into 50 Ω 2 VPP unloaded
Output impedance	50 Ω ±5 Ω

External 10 MHz Reference Input (SMA connector)

Frequency	10 MHz ±100 PPM
Input amplitude	100 mVPP to 5 VPP square-wave or sine-wave
Input impedance	50 Ω ±5 Ω

Physical and Environment

Operating Environment

Maximum altitude	3048 m
Ambient temperature range	0 to 55 °C
Relative humidity range	10% to 90%, noncondensing

Storage Environment

Ambient temperature range	-40 °C to 70 °C
Relative humidity range	5% to 95% noncondensing

Shock and Vibration

Operational shock	30 g peak, half-sine, 11 ms pulse duration
Random Vibration (Operating)	5 to 500 Hz, 0.3 Grms, 3 axes
Random Vibration (Nonoperating)	5 to 500 Hz, 2.46 Grms, 3 axes

Sound Pressure Level

Auto fan (up to ~25 °C ambient)	46 dBA
High fan	64 dBA

Sound Power

Auto fan (up to ~25 °C ambient)	56 dBA
High fan	76 dBA

Backplane

Size	3U
------	----