

SPECIFICATIONS

STLITE-CPCI-8R(+)

STLITE-CPCI-16R(+)

Satellite Series
CPCI Expansion System



**MEASUREMENT
COMPUTING™**

Revision 2, February, 2001

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STLITE-PCI-HOST, STLITE-CPCI-HOST

Typical for 25°C unless otherwise specified.

Power Consumption

| | |
|-----|------------|
| +5V | 375 mA max |
|-----|------------|

Features

| | |
|----------------|---|
| Bridge | Industry standard bridge. Intel 21150-AC. PCI 2.1, 32-bit 33 MHz PCI. Provides support for delayed transactions, enabling memory read, I/O, and configuration read buffering. |
| Connector | Shielded 80-pin SCSI D-type. Interfaces with Measurement Computing's <i>Satellite Series</i> bus expansion products. |
| Required Cable | STLITE-C-3. Three-foot shielded ribbon, 80-pin, D-type |

Interrupts

| | |
|------------|--|
| Interrupts | INTA#, INTB#, INTC#, INTD# routed to host PC |
|------------|--|

Environmental

| | |
|-----------------------------|-------------------------|
| Operating Temperature Range | 0 to 70°C |
| Storage Temperature Range | -40 to 100°C |
| Humidity | 0 to 95% non-condensing |

Mechanical

| | |
|-----------------|--|
| Card Dimensions | STLITE-PCI-HOST: Universal PCI variable-length Short Card: 137.0mm L x 18.0mm W x 107.0mm H STLITE-CPCI-HOST: +5V 3U CPCI: 160.0mm L, 100.0mm W, 20.3mm H |
|-----------------|--|

Host Bridge Connector Pin Out

| Pin | Signal Name | Pin | Signal Name |
|-----|---------------|-----|-------------|
| 1 | GND | 41 | HST_S_AD00 |
| 2 | HST_5V | 42 | HST_S_AD01 |
| 3 | GND | 43 | HST_S_AD02 |
| 4 | PWR_MON | 44 | HST_S_AD03 |
| 5 | GND | 45 | HST_S_AD04 |
| 6 | HST_S_SERR# | 46 | HST_S_AD05 |
| 7 | GND | 47 | HST_S_AD06 |
| 8 | HST_S_LOCK# | 48 | HST_S_AD07 |
| 9 | GND | 49 | HST_S_CBE0# |
| 10 | HST_S_STOP# | 50 | HST_S_AD08 |
| 11 | GND | 51 | HST_S_AD09 |
| 12 | HST_S_DEVSEL# | 52 | HST_S_AD10 |
| 13 | GND | 53 | HST_S_AD11 |
| 14 | HST_S_TRDY# | 54 | HST_S_AD12 |
| 15 | GND | 55 | HST_S_AD13 |
| 16 | HST_S_FRAME# | 56 | HST_S_AD14 |
| 17 | GND | 57 | HST_S_AD15 |
| 18 | HST_S_IRDY# | 58 | HST_S_CBE1# |
| 19 | GND | 59 | HST_S_PAR |
| 20 | HST_S_PERR# | 60 | HST_S_CBE2# |
| 21 | GND | 61 | HST_S_AD16 |
| 22 | HST_S_GNT# | 62 | HST_S_AD17 |
| 23 | GND | 63 | HST_S_AD18 |
| 24 | HST_S_REQ# | 64 | HST_S_AD19 |
| 25 | GND | 65 | HST_S_AD20 |
| 26 | HST_S_RST# | 66 | HST_S_AD21 |
| 27 | GND | 67 | HST_S_AD22 |
| 28 | HST_GPIO3 | 68 | HST_S_AD23 |
| 29 | HST_GPIO2 | 69 | HST_S_CBE3# |
| 30 | HST_GPIO1 | 70 | HST_S_AD24 |
| 31 | HST_GPIO0 | 71 | HST_S_AD25 |
| 32 | INTB#_EXP | 72 | HST_S_AD26 |
| 33 | GND | 73 | HST_S_AD27 |
| 34 | INTC#_EXP | 74 | HST_S_AD28 |
| 35 | GND | 75 | HST_S_AD29 |
| 36 | INTA#_EXP | 76 | HST_S_AD30 |
| 37 | GND | 77 | HST_S_AD31 |
| 38 | INTD#_EXP | 78 | GND |
| 39 | GND | 79 | S_CLK+ |
| 40 | S_CLK- | 80 | GND |

STLITE-CPCI-16R, STLITE-CPCI-16R+, STLITE-CPCI-8R, , STLITE-CPCI-8R+

Typical for 25°C unless otherwise specified.

Features

| | | | | | |
|---------------------|---|-----------------------|--------------|-----------|--------------------|
| Slots | STLITE-CPCI-16Rx: Sixteen 3U CPCI slots STLITE-CPCI-8Rx: Eight 3U CPCI slots | | | | |
| PCI Bus | Embedded industry standard bridge, Intel 21150-AC 32 bit, 33 MHz. | | | | |
| Power Supply | 250W ATX Style | | | | |
| Line Voltage Input | 115VAC/10A or 230VAC/5A, switch-selectable, 50/60Hz | | | | |
| Power Ratings | Volts | Minimum Load | Maximum Load | Tolerance | Power ¹ |
| | +3.3V ² | 0.2 Amps | 14 Amps | ±10% | 46W |
| | +5V | 2.0 Amps ⁵ | 27 Amps | ±5% | 135W |
| | +12V ^{3,4} | 0.2 Amps | 9 Amps | ±5% | 108W |
| | -12V | 0.0 Amps | 0.5 Amps | ±10% | 6W |
| | (1) Total Power not to exceed 250W (2) Backplane circuits consume 730 mA from the +3.3V supply. (3) The system monitoring hardware consume 40 mA from the +12V supply. (4) The optional fan tray with 4 fans consumes 500 mA (typical) from the +12V supply (5) For some ATX power supplies, if the minimum load is not drawn from the +5V supply | | | | |
| Certification | UL CE CSA FCC Class A Approved | | | | |
| Interface Connector | Shielded 80-pin SCSI D-type. Interfaces with Measurement Computing <i>Satellite Series</i> | | | | |
| Interface Cable | STLITE-C-3. Three-foot shielded ribbon, 80-pin, D-type. | | | | |

System Monitoring

System monitoring features are accessed via VB/C++ example programs and DLL provided with the product.

| | |
|--|---|
| A/D Converter | TLV2548, 8-channel, 12-bits. One per STLITE-CPCI-16R/-8R Three per STLITE-CPCI-16R+. Two Per STLITE-CPCI-8R+ |
| | CPCI voltages; +5V, +3.3V, +12V, and -12V Absolute Accuracy: ±2% |
| Sensor | Semiconductor type, Range: -55 to 150°C, Resolution: 0.03°C Absolute Accuracy: ±2.5°C max, ±0.9°C typ over entire range. |
| Backplane | One sensor located in the back cavity |
| Slots (only available on STLITE-CPCI-16R+/8R+) | One sensor positioned above each slot on a circuit card mounted in |
| Current Monitoring | 15 mA < I < 450 mA, 6% absolute accuracy. Independent for left a fuse. Fan currents of 15 mA or less indicate an OFF or OPEN cond |
| Fan Tray Connector | Each chassis includes a fan tray cable with Positronics PLA03F000 STLITE-CPCI-FAN unit. |
| Timeout | Jumper-selectable for 1, 10, and 30 seconds |
| Alarm | Alarm outputs provide TTL, 500 mA current sink and SPDT relay NO/NC/C pins. |

Environmental

| | |
|-----------------------------|-------------------------|
| Operating Temperature Range | 0 to 50°C |
| Storage Temperature Range | -20 to 65°C |
| Operating Humidity | 0 to 90% non-condensing |
| Storage Humidity | 0 to 95% non-condensing |

Mechanical

| | |
|--------------|---|
| Enclosure | 19" Rack Mount design |
| Dimensions | 14.30" L x 17.16" W x 5.24" H |
| Weight | 11 lbs. |
| Construction | 0.030" and 0.080" Aluminum |
| Cooling | Power supply fan plus an optional fan tray with four fans |

CHASSIS BRIDGE CONNECTOR PIN OUT

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | GND | 41 | HST_AD00 |
| 2 | PWR_MON | 42 | HST_AD01 |
| 3 | GND | 43 | HST_AD02 |
| 4 | TRGT_5V | 44 | HST_AD03 |
| 5 | GND | 45 | HST_AD04 |
| 6 | HST_SERR# | 46 | HST_AD05 |
| 7 | GND | 47 | HST_AD06 |
| 8 | HST_LOCK# | 48 | HST_AD07 |
| 9 | GND | 49 | HST_CBE0# |
| 10 | HST_STOP# | 50 | HST_AD08 |
| 11 | GND | 51 | HST_AD09 |
| 12 | HST_DEVSEL# | 52 | HST_AD10 |
| 13 | GND | 53 | HST_AD11 |
| 14 | HST_TRDY# | 54 | HST_AD12 |
| 15 | GND | 55 | HST_AD13 |
| 16 | HST_FRAME# | 56 | HST_AD14 |
| 17 | GND | 57 | HST_AD15 |
| 18 | HST_IRDY# | 58 | HST_CBE1# |
| 19 | GND | 59 | HST_PAR |
| 20 | HST_PERR# | 60 | HST_CBE2# |
| 21 | GND | 61 | HST_AD16 |
| 22 | HST_GNT# | 62 | HST_AD17 |
| 23 | GND | 63 | HST_AD18 |
| 24 | HST_REQ# | 64 | HST_AD19 |
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| 31 | HST_GPIO0 | 71 | HST_AD25 |
| 32 | INTB#_EXP | 72 | HST_AD26 |
| 33 | GND | 73 | HST_AD27 |
| 34 | INTC#_EXP | 74 | HST_AD28 |
| 35 | GND | 75 | HST_AD29 |
| 36 | INTA#_EXP | 76 | HST_AD30 |
| 37 | GND | 77 | HST_AD31 |
| 38 | INTD#_EXP | 78 | GND |
| 39 | GND | 79 | HST_CLK+ |
| 40 | HST_CLK- | 80 | GND |

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