

# z3985 Embedded Controller PXI Express



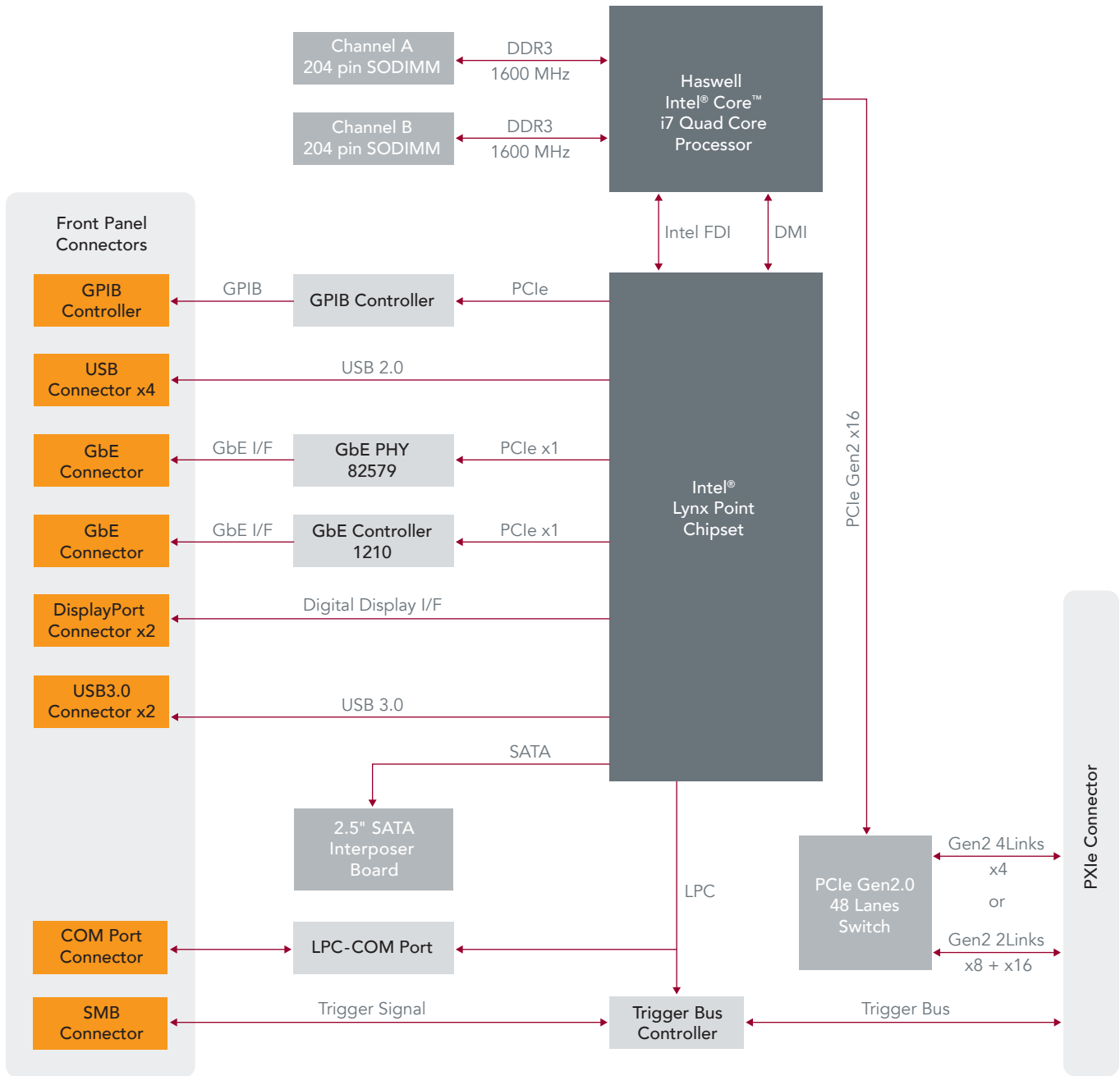
## Port Descriptions



Port	Description
Video	Dual DisplayPort
Ethernet	Dual Gigabit, RJ-45
USB	Four USB 2.0, Two USB 3.0
GPIB	Micro-D 25 pin
Trigger I/O	Bi-directional external trigger, SMB
Serial	RS-232-/422/485, D-SUB9

LED	Description
PW	System Power. GREEN when functioning properly.
HD	Flashes YELLOW during disk access.
USR	User-programmable BLUE LED indicator.

## Block Diagram



## Specifications

Specification	Value
CPU	Intel® Core™ i7-4700EQ 2.4 GHz
Memory	Dual channel DDR3L SODIMM 16 GB 1600 MHz
Maximum system throughput	8 GB/s
PXI Express Link	4 links: x4 x4 x4 x4 2 links: x16 x8
Integrated SATA storage	240 GB SSD
Integrated I/O	Dual Gigabit Ethernet Ports Four USB 2.0 ports Two USB 3.0 ports Built-in GPIB (IEEE-488) controller, Micro-D connector Dual DisplayPort video connectors Trigger I/O for external triggering functions RS-232-/422/485 serial interface, D-SUB9 connector
Operating system	Windows® 7 x64

## Physical & Environmental

### Power Requirements

Specification	Value
Maximum	0.13 A @ 5V standby 3.0 A @ 3.3 V 3.9 A @ 5 V 5.3 A @ 12 V
Typical	0.13 A @ 5V standby 3.0 A @ 3.3 V 2.1 A @ 5 V 1.6 A @ 12 V

### Size & Weight

Specification	Value
Physical size	1 system slot plus three controller expansion slots
Dimensions	3U/4-slot PXI/CompactPCI standard
Weight	1 kg (2.2 lbs)

## Temperature Range

Specification	Value
Operating	0° C to +55° C ambient
Storage	-20° C to +70° C ambient

## Relative Humidity

Specification	Value
Operating	5 to 95%, non-condensing

## Shock and Vibration

Specification	Value
Shock	30 G, half sine, 11 ms pulse duration
Vibration	Operating: 5 to 500 Hz, 0.21 G <sub>rms</sub> , 3 axes Storage: 5 to 500 Hz, 2.46 G <sub>rms</sub> , 3 axes

## Terminology

### Numeric Prefixes

When referring to numeric values, this document will use SI (International System of Units) and IEC (International Electrotechnical Commission) standard prefixes. Prefix definitions are in the following table.

Prefix	Multiplier
n (nano)	1/(1000x1000x1000)
μ (micro)	1/(1000x1000)
m (milli)	1/1000
k/K (kilo)	1000
M (Mega)	1000x1000
G (Giga)	1000x1000x1000
Ki (Kibi)	1024
Mi (Mebi)	1024x1024
Gi (Gibi)	1024x1024x1024

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## Differential Outputs

**Single-Ended** is used to refer to the output on either the + or – output pin

**Differential** is used to refer to the output between the + and- output pins

**Vd** indicates Volts differential

**Vppd** indicates Volts peak-to-peak differential

## Safety

This product is designed to meet the requirements of the following standard of safety for electrical equipment for measurement, control and laboratory use: EN 61010-1

## Electromagnetic Compatibility

CE Marking EN 61326-1:1997

FCC Part 15 (Class A) Compliant

## CE Compliance

Immunity: EN61326-1



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