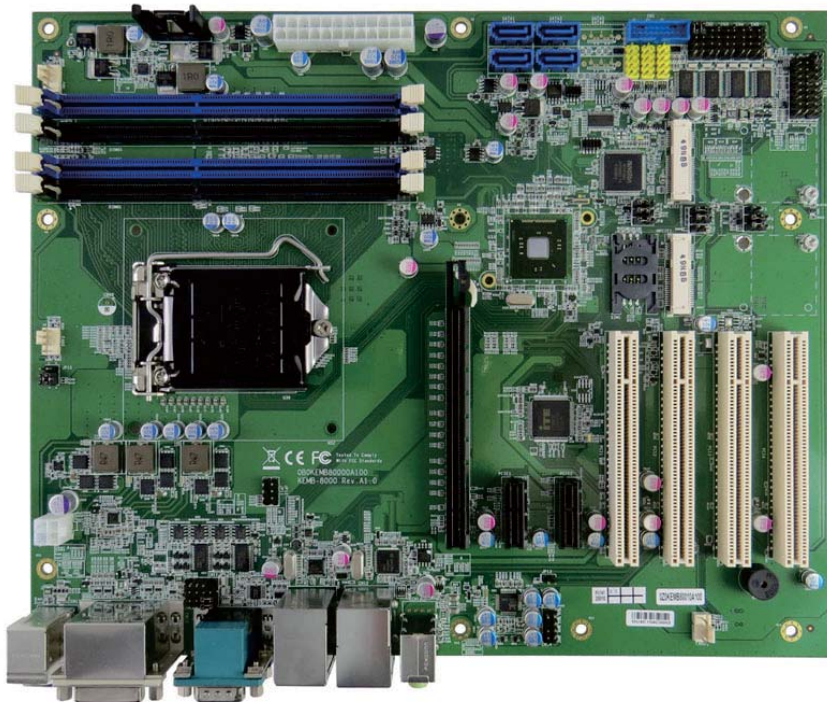


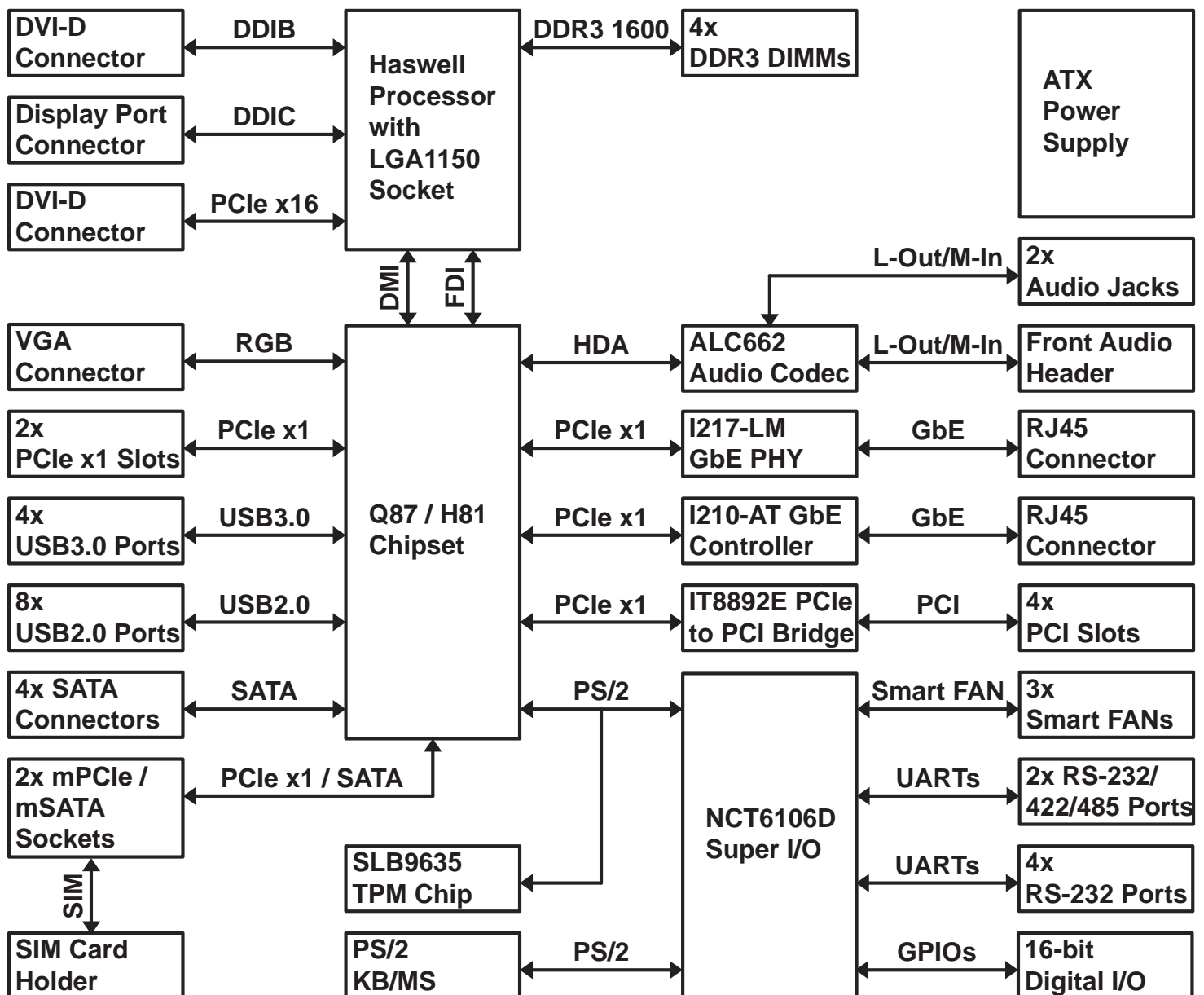
# KEMB-8000 Series

Industrial Motherboard in ATX Form Factor  
with 4th Generation Intel® Core™ Processors



- 4th Generation Intel® Core™ Processors
- Intel® H81 / Q87 Chipset
- Intel® ATX form factor
- 2x DDR3 DIMM Slot up to 16GB / 4x DDR3 DIMM Slot up to 32GB
- 1x VGA, 1x DVI-D, 1x DP
- 2x GbE, 2x USB3.0 / 4x USB3.0, 6x USB2.0 / 8x USB2.0, 6x COM
- 1x PCIe x16, 2x PCIe x1, 4 PCI, 1x mPCIe / 2x mPCIe/mSATA, 1x SIM
- 16-bit Digital I/O supported
- Watchdog Timer, Hardware Monitor

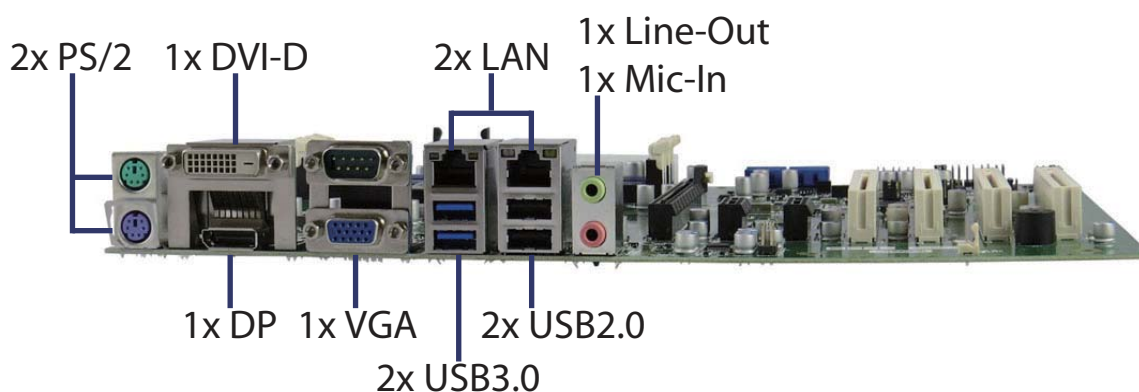
•• Block Diagram



## Technical Information

<b>CPU Support</b>	LGA1150 4th Generation Intel® Core™ Processors	<b>Audio</b>	2x header for rear Line-out & MIC-in 1x header for front Audio
<b>Chipset</b>	Intel® H81 Chipset (KEMB-8000 only) Intel® Q87 Chipset (KEMB-8001 only)	<b>Power Connector</b>	One 2x24-pin, pitch 3.96mm Wafer ATX power DC input One 2x2-pin, pitch 3.96mm Wafer for CPU Core power supply
<b>Memory</b>	2x DDR3 DIMM Slots support up to 16GB memory (KEMB-8000 only) 4x DDR3 DIMM Slots support up to 32GB memory (KEMB-8001 only)	<b>Expansion</b>	4x PCI Slots, 32-bit/33MHz 1x PCIe16 Slot 2x PCIe1 Slots 1x mPCIe Socket (KEMB-8000 only) 2x mPCIe/mSATA Sockets (KEMB-8001 only) 1x SIM Card Holder
<b>BIOS</b>	AMI uEFI BIOS 1x 128Mb SPI Flash memory onboard	<b>Cooling</b>	3x Wafer for CPU, System & AUX Smart FAN
<b>Display</b>	1x VGA 1x DVI-D 1x DP	<b>Watchdog Timer</b>	Programmable WDT to generate System reset event
<b>Peripheral Support</b>	4x 7P SATA Connectors 2x USB3.0 Type-A Connector (KEMB-8000 only) 4x USB3.0 Type-A Connector (KEMB-8001 only, 2x on rear) 6x USB2.0 Type-A Connector (KEMB-8000 only, 2x on rear) 8x USB2.0 Type-A Connector (KEMB-8001 only, 2x on rear) 6x COM (COM1 & COM2 support RS-232/422/485, COM1 on rear) 1x 16-bit DIO 2x Mini-DIN PS/2 KB/MS	<b>Hardware Monitor</b>	Input & Core Voltages monitoring CPU & System Temperatures monitoring
<b>MSIC Support</b>	1x Header for Reset button, HDD LED and External Speaker 1x Header for Power button, Power LED and SM bus	<b>OS Support</b>	Windows 7 / Windows 8 / Linux
<b>LAN</b>	2x GbE RJ-45 Connector	<b>Dimensions</b>	Intel® ATX form factor (304.8 x 244 mm / 12" x 9.6")
<b>Audio</b>	2x header for rear Line-out & MIC-in 1x header for front Audio	<b>Environmental Factors</b>	Operation Temp: 0°C - 60°C Storage Temp: -20°C - 80°C Humidity: 0% - 95%
		<b>RTC</b>	Chipset intergrated RTC
		<b>Certification</b>	CE, FCC Class A

## KEMB-8000 Series I/Os



## Ordering Information

Article	Part No.	Description
KEMB-8000	BMMB8000-000000T	ATX CPU Board, Intel® Haswell LGA1150 Socket, Intel® H81 Chipset, 2x DDR3 DIMM, 2x GbE, 1x VGA, 1x DVI-D, 1 x DP, 2x USB3.0, 6x USB2.0, 1x mPCIe
KEMB-8001	BMMB8000-010000T	ATX CPU Board, Intel® Haswell LGA1150 Socket, Intel® Q87 Chipset, 4x DDR3 DIMM, 2x GbE, 1x VGA, 1x DVI-D, 1 x DP, 4x USB3.0, 8x USB2.0, 2x mPCIe/mSATA