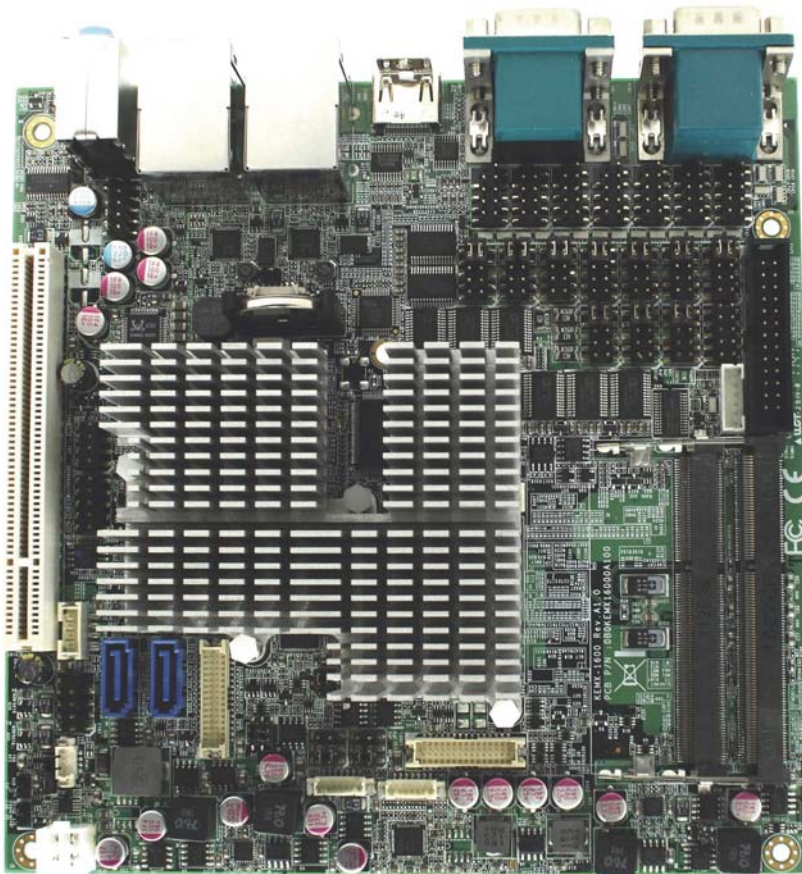


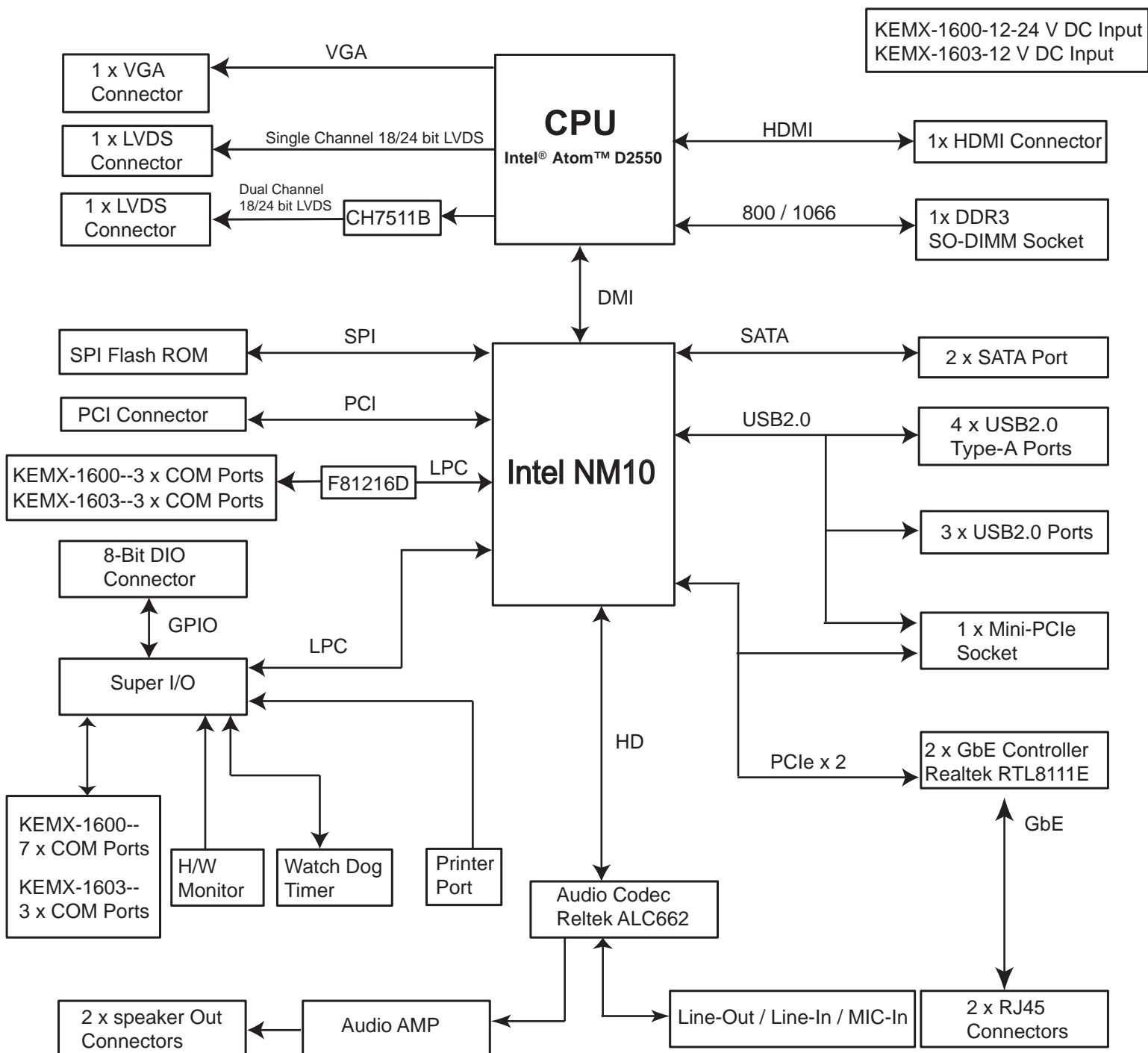
KEMX-1600 Series

Industrial Motherboard in Mini-ITX form factor with
Dual Core Intel® Atom™ Processor D2550



- Intel® Atom™ Processor D2550 (1M Cache, 1.86GHz)
- Intel® NM10 Express Chipset
- Intel® Graphics Media Accelerator 3650
- 1x Single-channel DDR3 800/1066 MHz memory support
- 7xUSB2.0, 2xGbE LAN, 2xSATA
- 8-bits Digital I/O supported
- 2x LVDS (Support Dual independent display)
- 1x HDMI, 1x VGA Supported
- PCI, Mini-PCIe expansion

Block Diagram

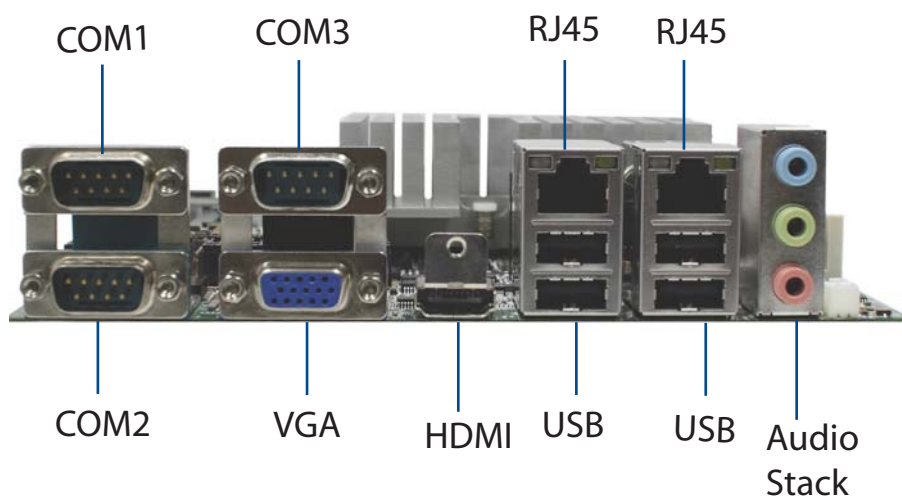


Technical Information

CPU Support
Intel® Atom™ Processor D2550 (1M Cache, 1.86GHz)
Chipset
Intel® NM10 Express Chipset
Memory
1x Single-channel DDR3 800/1066 MHz memory support (4GB max)
BIOS
AMI uEFI BIOS (16MB SPI flash ROM)
Graphics
Intel® Graphics Media Accelerator 3650 1x Single channel 18-bit/ 24-bit LVDS 1x Dual channel 18-bit/24-bit LVDS 1x HDMI type A connector on rear I/O 1x VGA connector on rear I/O
LAN
2x Gigabit Ethernet (Realtek RTL8111E) PXE/RPL/WOL supported
Audio
Realtek ALC662-VC HD Codec w/ 2W Audio Amplifier Line-In, Line-Out and Mic-In Supported 1x S/PDIF
Storage
2x SATA
USB
7x USB 2.0 supported
COM
KEMX-1600 --10 x COM ports supported (10 x COM ports with power selection on COM1~COM10) (1 x COM port with RS-232/422/485 selection on COM1) KEMX-1603 --6 x COM ports supported (6 x COM ports with power selection on COM1~COM6) (1 x COM port with RS-232/422/485 selection on COM1)

PS/2
1x PS/2 Keyboard/ Mouse (internal)
LPT
1x Parallel Port
DIO
1x 8-bits programmable DIO
Expansion Slot
1x PCI slot onboard 2x PCI master supported 1x Mini PCI Express socket onboard 1x SIM card module supported (optional)
Hardware Monitor
Operating voltage, CPU temperature and fan speed
Watchdog Timer
1-255 step, can be set with software on Super I/O
Power
KEMX-1600 --1x ATX-4P Connector, support single 12-24V DC power input KEMX-1603 --1x ATX-4P Connector, support single 12V DC power input
OS Supported
Windows 7
Dimensions
Mini-ITX (170 x 170 mm)
Environment
Operation Temp: 0°C - 60°C Storage Temp.: -20°C - 80°C Humidity: 0% - 95%
Certification
CE, FCC Class A

KEMX-1600 Series Rear I/O



Ordering Information

Article	Part No.	Description
KEMX-1600	BMMX1600-001004T	Mini-ITX CPU Board, Atom D2550+NM10, 1x DDR3 SODIMM, 2 x GbE LANs, 2 x LVDS, 10 x COMs, Line-in/Line-out/MIC-in, 12-24V DC, w/ Audio AMP
KEMX-1603 (Standard SKU)	BMMX1600-031004T	Mini-ITX CPU Board, Atom D2550+NM10, 1x DDR3 SODIMM, 2 x GbE LANs, 2 x LVDS, 6 x COMs, Line-in/Line-out/MIC-in, 12V DC only, w/ Audio AMP

Optional Accessories

Product Name	Quanmax P/N	Description
COM Cable*	0C5031002500020L	COM Port cable, pitch 2.54mm 10P, D-SUB 9P, L=250mm, with bracket, 180degree
USB Cable	0C502USB0201010L	USB cable, 2.54mm 10-pin to 2xUSB connectors with bracket, L=30cm
SATA Cable*	0C5010000000030L	SATA cable , 7-pin connector with lock, L=46cm
LPT Cable	0C5020002000010L	LPT CABLE 20CM , 2*13p 180degree , pitch=2.00 to DB-25
S/PDIF Cable	0C5021002000020L	SPDIF CABLE, pitch:2.54 1x2P to RCA connector ,L=20CM ,180 degree
PS/2 Cable	0C5020002500010L	Y-cable, 6-pin pitch 2.0mm wafer connector to KB&MS connector, L=25cm
SATA Power Cable*	0C5020000001590L	SATA power cable,WL2000H 1x4P 2.0pitch to SATA 1x15P 1.27pitch , L=460mm
DC Jack cable	0C5029002000070L	DC-Jack cable, ATX 4pin connector to DC-Jack 5.5mm(L)x2.5Φ, L=20cm