

KEEX-2020

Industrial 3.5" Embedded SBC with AMD M690E/SB600



- AMD Turion™ 64, Mobile Sempron™ – Socket S1
- AMD M690E/SB600 chipset
- DDR2-667 up to 2GB, 1x SODIMM
- M690E X1250 graphics core, 24-bit dual-channel LVDS, HDMI
- ATA133 & SATA 3 Gb/s
- 1x GbE, 8x USB 2.0, 1x COM, HD Audio w/ daughter board
- 1x PCIe x4 slot, 8-bit DIO, IrDA
- Watchdog Timer, Hardware Monitor, TPM 1.2

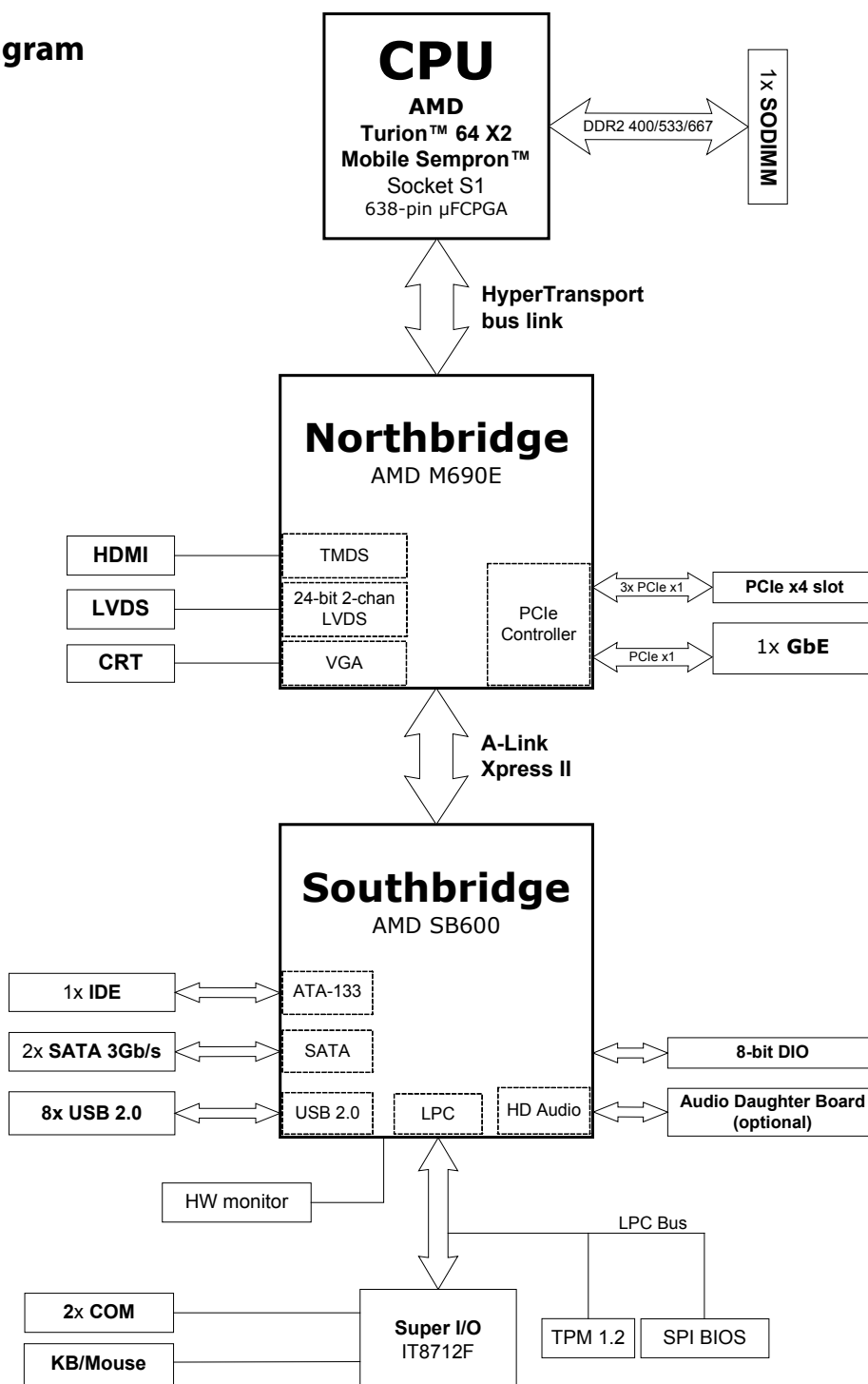
Product Overview

The new KEEX-2020 is a 3.5" form factor embedded single board computer combining the high performance of the AMD Turion™ 64 X2, Mobile Sempron™ (Socket S1) with the high integration of the AMD M690E/SB600 chipset. Featured are HyperTransport Technology, DDR2-667 SODIMM up to 2GB, M690E X1250 graphics core supporting VGA, HDMI, 24-bit dual-channel LVDS, Gigabit

Ethernet, ATA133 & SATA 3 Gb/s, PCIe x4 slot, 8x USB v2.0, 1x serial port, HD audio (via daughter board), and keyboard/mouse.

The KEEX-2020 is a compact, high performance industrial 3.5" embedded SBC that is ideal for multimedia, gaming, mobile PC, and thin client applications.

Block Diagram

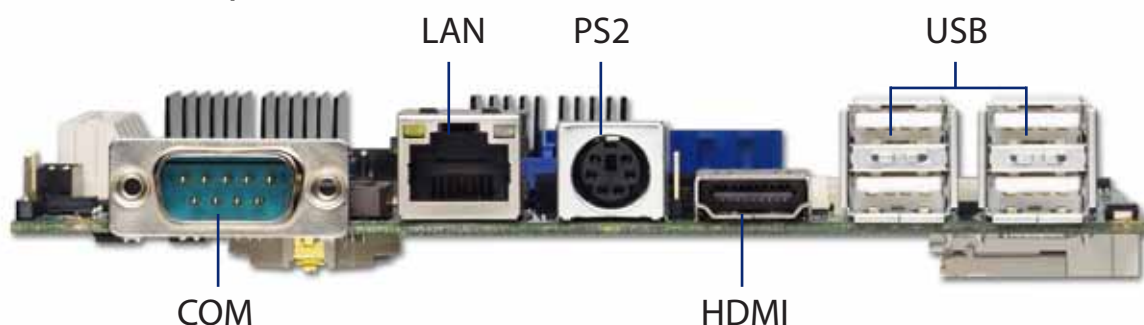


Technical Information

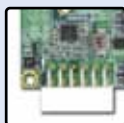
CPU Support	AMD Turion™ 64, Mobile Sempron™ (Socket S1)
Chipset	AMD M690E + SB600
Memory	1x DDR2 400/533/667 SO-DIMM Socket, up to 2GB
BIOS	AMI SPI Flash
Display	AMD M690E X1250 graphics core, 2048x1536 @ 32bpp supports Dual Display 24-bit dual-channel LVDS up to UXGA 1x HDMI
Peripheral Support	1x IDE ATA133 2x SATA 3Gb/s 8x USB 2.0 2x COMs (1x RS-232/422/485, 1x RS-232) 4x DI/DO 1x Mini-Din PS/2 KB/ MS
TPM	TPM 1.2

LAN	1x RJ-45, Gigabit Ethernet
Audio	HD Audio via optional daughter board
Power Connector	ATX-12P
Expansion	1x PCIe x4 slot (w/ 3x PCIe x1 speed)
Watchdog Timer	1-255 step
Hardware Monitor	Operating voltage, CPU temperature and fan speed
Dimensions	3.5" Embedded Board (102 x 146 mm)
Environmental Factors	Operation Temp: 0°C - 60°C Storage Temp.: -10°C - 85°C Humidity: 0% - 90%
Certifications	CE, FCC Class A

KEEX-2020 Rear I/O



Ordering Information

Article	Part No.	Description	
KEEX-2020	B3EX2020-001000T	3.5" Industrial SBC with AMD M690E/SB600 chipset, GbE, 24-bit Dual Channel LVDS, SATA, HDMI, PCIe x4 expansion and USB 2.0	
KEEX-2021	B3EX2020-011000T	3.5" Industrial SBC with AMD M690E/SB600 chipset, GbE, 24-bit Dual Channel LVDS, SATA, HDMI, PCIe x4 expansion and USB 2.0 (90° power connector)	

Accessories

Article	Part No.	Description
SATA Cable*	0C501ATA0746000L	SATA cable, 7-pin connector with lock, L=46cm
IDE Cable	0C501ATA4445300L	IDE cable, 44-pin to 44-pin with 2.0mm pitch connector, L=45cm
COM Port Cable	0C501P040926100L	COM Port cable, 10-pin 2.0mm to DB-9 connector with bracket, L=26cm
USB Cable	0C502USB0201200L	USB Cable, 10-pin 2.0mm to 2 x USB connectors with bracket, L=27cm
VGA Cable*	0C502VGA16P1500L	VGA cable, 2.0mm 16-pin connector to D-sub15 connector, L=15cm
Y Cable*	0C501P010420300L	Y cable, 6-pin Mini-Din connector to Keyboard/Mouse connectors, L=20cm
Power Cable*	0C501ATX12P1500L	ATX power cable, 20-pin to 12-pin ATX power connector, L=15cm
CPU Cooler Fan	0H05CPU50503000L	CPU Cooler Fan, 50mm(L) x 50mm(W) x 30mm(H)
KEDB-1000	BBDB1000-001000T	HD Audio daughter board with PCI bracket (Realtek ALC882)

* The item has been included in standard package.