

# NEX 611

Mini-ITX, AMD Embedded G-Series APU T48E/A50M/2 x DDR3/  
SO-DIMM, 2HDMI/VGA, PCIe4/mPCIe, 2GbE/4 x SATA3.0/14 x USB/6 x COM/mSATA



## Main Features

- AMD Embedded G-Series APU T48E/A50M Express Chipset
- Single channel 2 x DDR3/SO-DIMMs 1066/1333MHz up to 8GB
- Support HDMI/LVDS (shared 2nd. HDMI/VGA dual displays)
- 2 x Intel® GbE, 4 x SATA3.0, 14 x USB2.0, 6 x COM, 8 x GPIO
- 1 x PCIe4, 1 x mPCIe, 1 x mSATA
- Support AT/ATX mode by ATX Power Input

## Product Overview

NEX 611 is an industrial motherboard with Mini-ITX form factor, which onboard AMD G-series T48E onboard A50M chipset. NEX 611 support single channel 2 x DDR3/SO-DIMMs 1333/1066MHz memory up to 32GB system memory. The embedded A50M support dual displays by legacy VGA and 2 x HDMI with max resolution 1920 x 1200. The A50M chipset manages up to 4 x SATA 3.0 with software RAID 0/1/5/10 supported and performs up to 14 x USB2.0) ports. NEX 611 support PCIe4 amd mPCIe, dual Intel® GbE ports and up to 6 x Series ports incl. 2 x RS-232/422/485 pre-selected in BIOS setting. NEX 611 could be integrated into 1U/2U/4U rack mounted chassis or Desktop Tower as completed system solution for widely industrial applications in the new era of digital infrastructure with NEXCOM.

## Specifications

### CPU Support

- Onboard AMD G-Series T48E : 2 x1.4GHz/512MB/max. TDP 18W/  
AMD RadeonTM HD6310, 520MHz/Fansink

### Main Memory

- 2 x 204-pin single channel DDR3/SO-DIMM 1066/1333Mhz up to  
32GB system memory

### Chipset

- AMD® A50M Chipset

### BIOS

- AMI BIOS UEFI
- Plug and play support

### On-board LAN

- 2 x Realtek RTL8111E PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LED

### Display

- T48E: AMD RadeonTM HD 6310
- 2 x HDMI
- 1 x VGA

### Expansion

- 1 x PCIe4
- 1 x mPCIe

### Edge I/O Interfaces

- 1 x Combo for PS2 KB/MS with dual stack USB2.0
- 2 x stack DB9 for COM1 & COM2
- 2 x HDMI
- 1 x VGA
- 2 x RJ45 with dual stack USB2.0
- Line-In/Line-out/MIC phone jack

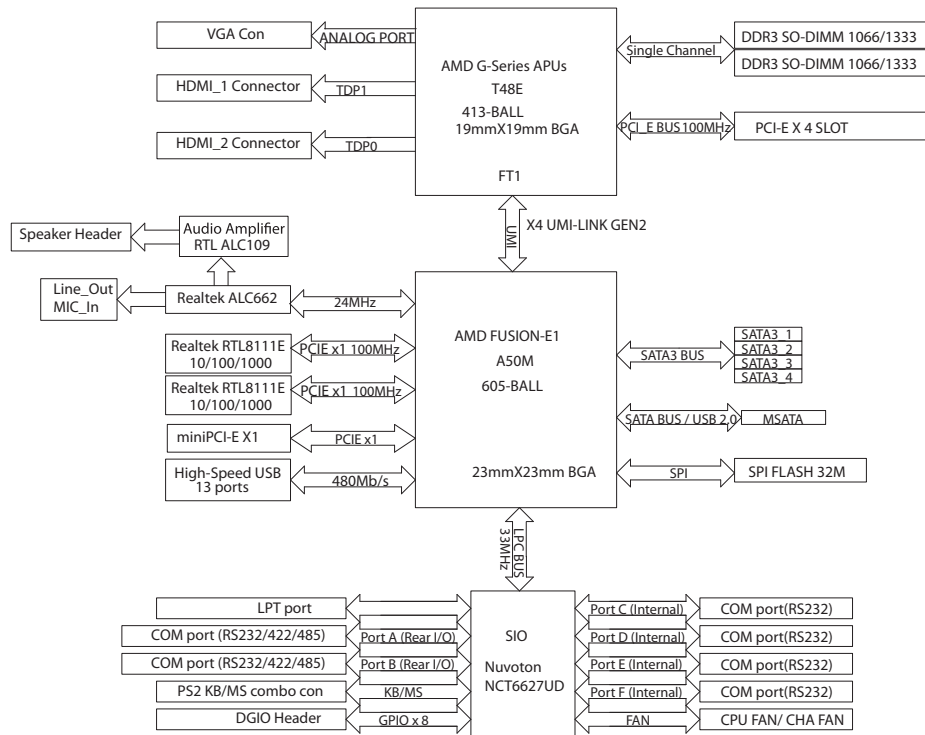
### I/O Interface

- USB2.0: 14 ports (6 x USB2.0 on edge I/O, 6 x internal box-header,  
1 x vertical Type A, 1 x for mPCIe)
- Serial: 6 ports (default 2 x RS-232 pre-selected RS422/485 in BIOS,  
4 x RS-232 by internal pins-header)
- SATA 3.0 HDD: 4 ports, port 0, 1, 2, 3, and 1 x SATA Power by  
1 x 4Pins
- Support Software RAID 0/1/5/10 and Intel® Matrix Storage
- GPIO: Supports 4 x GPI and 4 x GPO with TTL level (5V or 12V by  
Jumper)

### Edge I/O Interface

- On- board buzzer x 1
- 9 x pins system header for Power LED/Power On/Reset/HDD LED
- 1 x 4-pin fan connector (for CPU); 1 x 3-pin fan connectors  
(for CPU or System)
- On-chip RTC with battery/CR2032 backup holder onbo

## Block Diagram



### System Monitor

- 4 Voltages (+3.3V, +5V, +12V, Vcore)
- 2 Temperatures (For CPU and System)
- 3 FAN speed monitors (1 for CPU and 2 for Chassis Fan/System)

### Power Input

- Support AT/ATX mode
- ATX 4-pin connector for +12V

### Dimensions

- Mini-ITX
- Dimension: Lx W, 170mm x 170mm; 6.7" x 6.7" inches

### Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

### Certifications

- Meet CE
- Meet FCC

## Ordering Information

### ♦ NEX 611-20PBK (P/N : 10G00061101X0)

Bulk-Packed 20 x pcs Mini-ITX, AMD onboard T48E/A50M, 2DDR3/SO-DIMM, 2HDMI/VGA PClex4/mPCIe, 4SATA3.0, 14USB2.0, 2Gbe, 6COM, mSATA, 4pin ATX Power Input