



Features

- **AMD G-Series T56N 1.6GHz/ T40N 1.0GHz CPU**
- **AMD A55E Controller Hub Chipset**
- **One 204-pin SODIMM Socket Supports Up to 4GB DDR3 1066 SDRAM**
- **AMD Radeon HD 6310/ HD 6250 Graphics**
- **Dual View, HDMI, VGA, 18-bit Single-channel LVDS**
- **Realtek ALC892 Supports 7.1-CH HD Audio**
- **Dual Realtek RTL8111DL Gigabit Ethernet**
- **1 PCIe4, 1 Mini PCIe, 1 CFast**
- **5 SATA 3.0, 4 COM, 8 USB, 8-bit GPIO**
- **RAID 0, 1, 5, 10 Support**



Specifications

System

• CPU	AMD G-Series T56N 1.6GHz/ T40N 1.0GHz
• BIOS	AMI EFI 16Mb SPI
• System Chipset	AMD A55E Controller Hub
• I/O Chip	Winbond W83627DHG-P
• System Memory	One 204-pin SODIMM Socket Supports Up to 4GB DDR3 1066 SDRAM
• Watchdog Timer	Reset: 1 to 255 sec/min per step
• H/W Status Monitor	Monitoring Temperature, Voltage and Cooling Fan Status. Auto Throttling Control when CPU Overheats.
• Expansion	1 PCIe4 Gen.2, 1 Mini PCIe, 1 CFast
• TPM	Onboard TPM 1.1/ 1.2 by Infineon SLB9635 (Optional)
• Power State	Yes (S3/ S4/ S5)
• SmartFan Control	Yes

I/O

• MIO	4 COM RS-232, 5 SATA 3.0, 2 LAN, 1 HDMI, 1 VGA, 1 LVDS, 1 eDP, 1 Inverter, 1 PS/2 Keyboard, 1 PS/2 Mouse
• USB	8 USB 2.0 (4 Rear, 4 Internal)
• GPIO	8-bit General Purpose I/O

Audio

• Audio Codec	Realtek ALC892 Supports 7.1-CH HD Audio
• Audio Interface	Line-in, Line-out, Mic-in, S/PDIF, Front Audio Header
• Audio Amplifier	3W + 3W, TPA3005

Ethernet

• LAN 1	Realtek RTL8111DL Gigabit Ethernet
• LAN 2	Realtek RTL8111DL Gigabit Ethernet

Display

• Chipset	AMD Radeon HD 6310 (T56N)/ AMD Radeon HD 6250 (T40N)
• Display Memory	Shared Memory, Up to 512MB
• Dual Display	VGA + LVDS, VGA + HDMI, LVDS + HDMI, eDP + HDMI, eDP + VGA
• VGA	Onboard T56N (18W) Supports Up to 2560 x 1600 Onboard T40N (9W) Supports Up to 1920 x 1200
• HDMI	Onboard, Supports HDMI 1.3a & 1080P Up to 1920 x 1200
• LVDS	Onboard, 18-bit Single-channel LVDS
• LVDS Backlight	Yes, PWM Control (Backlight Adjusted from AMD A55E Controller Hub)
• eDP	Onboard T56N (18W) Supports Up to 2560 x 1600 Onboard T40N (9W) Supports Up to 1920 x 1200

Mechanical & Environmental

• Power Type	ATX (Supports at AT Mode)
• Operating Temperature	0 ~ 60°C (32 ~ 140°F)
• Operating Humidity	0 ~ 90% Relative Humidity, Non-condensing
• Size (L x W)	6.69" x 6.69" (170mm x 170mm)
• Weight	0.96lbs (0.436Kg)

Ordering Information

• EMX-A55E-56N-A1R

AMD G-Series T56N 1.6GHz Mini ITX Motherboard with A55E Controller Hub Chipset

• EMX-A55E-40N-A1R

AMD G-Series T40N 1.0GHz Mini ITX Motherboard with A55E Controller Hub Chipset