## Cool FrontRunner-AF

PC/104-Plus Single Board Computer AMD G-Series Processor



## **Outstanding Graphics Features**

The accelerated processing unit (APU) supports single or dual-independent high resolution displays and exceptional multi-media capability with hardware decode support for H.264, VC-1, MPEG2, WMV, DivX and Adobe Flash.

DirectX® 11 support guarantees awesome graphics performance, stunning 3D visual effects and dynamic interactivity.

Advanced discrete-level GPU with OpenGL 4.0 and OpenCL<sup>TM</sup>

1.1 support in an integrated device provides support to build the designs of tomorrow, today

Unprecedented graphics performance/watt thru advanced graphics and hardware acceleration delivering over 3X performance per watt of previous generation.

## **Specifications**

Board Format	PC/104-Plus 96 mm x 90 mm (3.775" x 4.050")
Processor	AMD T40R, 1.0 GHz, single core AMD T56N, 1.65 GHz, dual core
Platform controller hub	AMD Hudson-E1 Fusion
Super IO	SCH3112
RAM (max.)	512 MB 4 GB SODIMM, DDR3 1333 (T56N) / 1066 (T40R)
Graphics	Radeon HD6250, 280 MHz (T40R) Radeon HD6310, 600 MHz (T56N)
VGA	Yes
LVDS	Dual channel, 24 bits 1920x1200 pixel at 60 Hz max.
Panel Backlight	+12V, +5V, including control signal
Audio	HD audio
USB	6 x USB 2.0 host ports
Ethernet	10/100/1000 MBit
Serial	2 x RS232/RS422/RS485
SATA	1 SATA port 1 CFAST slot
PS2	Yes
ISA Bus	PC/104 via LPC to ISA bridge

PCI Bus	PC/104-Plus, 3.3V compliant. Peripherals need their own 3.3V supply.
SPI bus	Yes
Status LED	HDD, power mode, live, 2x Ethernet, watchdog
RTC Backup	Lithium battery, CR1225, changeable
Watchdog	Yes (1 second 255 minutes)
Power Supply	5 V $\pm$ 5 % All voltages are generated on-board.
Power Consumption	10W18W, depending on processor and memory
Cooling	T40R: passive T56N: active
MTBF	172.356 hours at 25°C
Operating temperature	0°C+60°C (commercial, all versions) -20°C+60°C (industrial, all versions) -40°C+85°C (extended, only T40R)
BIOS	EFI 2x SPI Flash (fail save)
LEMT	Condition monitoring, with power sense
Supported OS	Windows 7, Windows Compact 7 Windows XPe, Windows XP Linux







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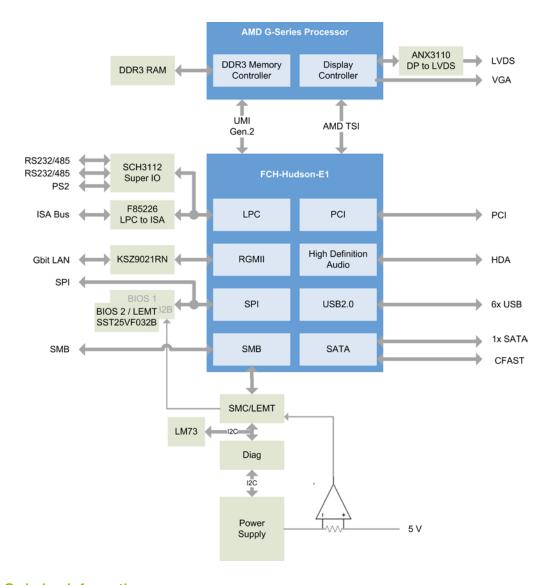
## **Block Diagram**











#### **Ordering Information**

Ordering Number	Description
<i>t</i> 03-0029-10	PC/104-Plus CPU board with AMD Fusion T40R, 1.0 GHz, heat spreader included
703-0028-10	PC/104-Plus CPU board with AMD Fusion T56N, 1.6 GHz, heat spreader included. Commercial temperature range 0°C+60°C
803-0028-10	PC/104-Plus CPU board with AMD Fusion T56N, 1.6 GHz, heat spreader included. Industrial temperature range -20°C+60°C

Note: t denotes the temperature range. Use 7 for commercial, 8 for industrial and 9 for extended temperature range

