



AMD DB-FT1 Development Board

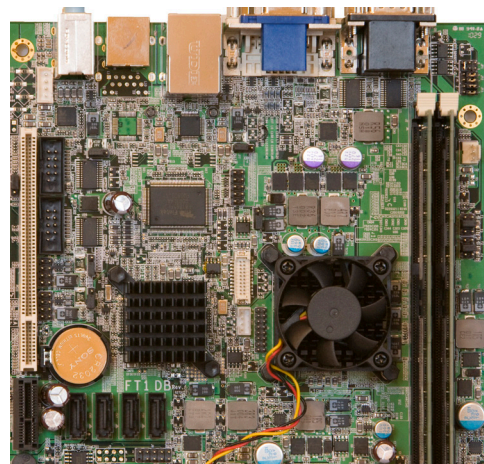
PRODUCT OVERVIEW

The AMD DB-FT1 development board is an evaluation board for the AMD Embedded G-Series platform, a low power processor and advanced GPU integrated into a single embedded Accelerated Processing Unit (APU). The platform is capable of delivering high display resolution, up to 2560x1600 pixels, and high performance multi-media, while maintaining a low-power design in a small form factor. Its power efficient and space saving advantages are directly attributable to AMD's innovative power optimized processor core design. Therefore, the AMD Embedded G-Series is an ideal platform for a multitude of embedded applications such as Digital Signage, Integrated x86 Set-Top-Box (xSTB), Thin Clients, and Casino Gaming applications that demand high quality multi-media and an exceptional visual experience.

The DB-FT1, a mini-ITX form factor board, supporting either the two-chip Ball Grid Array (BGA) packaged dual-core AMD Embedded G-T56N processor with AMD Radeon™ HD 6310 graphics, or dual-core AMD Embedded G-T40N processor with AMD Radeon™ HD 6250 graphics, combined with the AMD A55E controller hub, enables customers to fully explore the rich feature set of the platform. Supporting 2D and 3D graphics, video acceleration, and dual independent display support through a variety of display interfaces such as eDP, DVI, DisplayPort, LVDS, HDMI™, and VGA.

COMPREHENSIVE DEVELOPMENT TOOLS

The DB-FT1 development board not only demonstrates AMD Embedded G-Series platform advantages, but also underscores AMD's commitment to provide customers with a comprehensive evaluation unit as a development tool for engineers designing products based on AMD's APU generation architecture. The evaluation kit comes with software and configuration options.



Key Architecture Benefits

PROCESSOR

- Supports AMD Embedded G-Series processors up to 18W

MEMORY DEVICE

- Two UDIMM DDR3 UDIMMs, single-channel, non-ECC
- Support up to DDR3-1066

CONTROLLER HUB

- Revision B board comes with AMD A45 controller hub
- Revision C board comes with AMD A55E controller hub

SUPPORTED FEATURES

- VGA, DVI-D, 18-bit single-channel LVDS support
- 1 PCI slot (33MHz/32-bit)
- 1 PCIe® x1 slot
- 4 SATA 3Gbps ports (with RAID 0/1/5/10)¹
- 8 USB ports (4 I/O, 4 internal)
- 4 Serial ports (RS232/RS422/RS485)
- Controller hub integrated clockgen
- Automated fan control (CPU TSI support)
- Fintek F81865-I SIO
- Realtek 8111DL PCIe GbEx1 LAN controller
- Realtek HD audio codec ALC269
- ATX power input

REAR I/O CONNECTIONS

- 1 RJ45 Ethernet jack
- 1 DVI-D connector (or HDMI passive adapter of customer's own provision)
- 1 VGA connector
- 4 USB ports
- 3 x 1/8" phono audio jacks (2-ch amplified out, line in, mic)
- 2 DB9 Serial port connectors

BOARD DESIGN

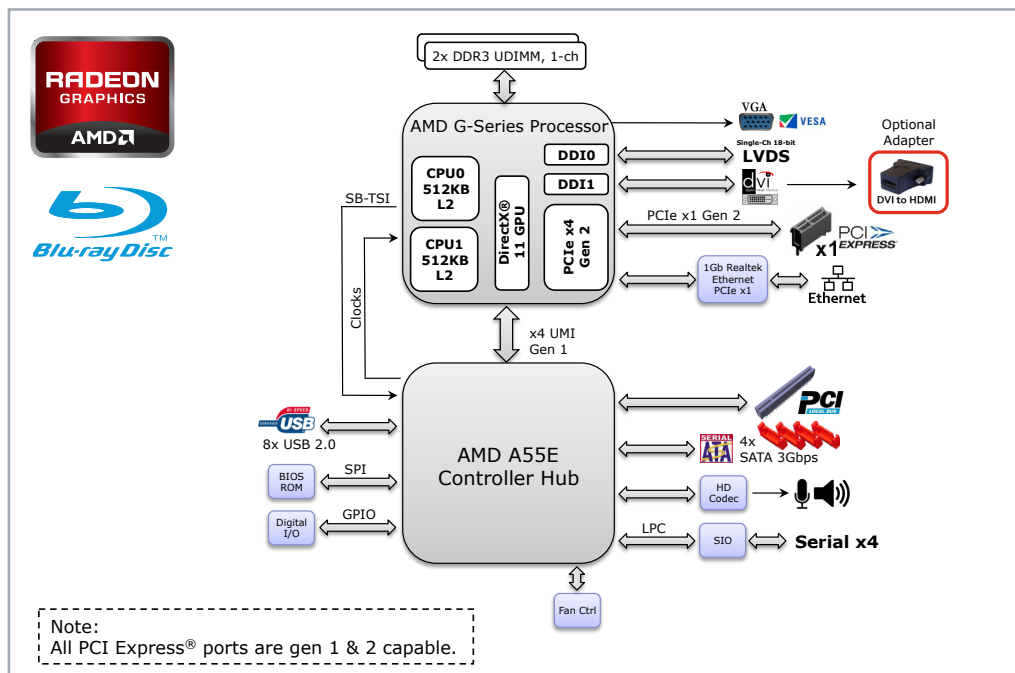
- Mini-ITX PCB, 6-layer
- AMD Embedded Probe Header

SOFTWARE INCLUDED

- Platform specific BIOS implementation
- Diagnostics and development tools
- AMD Embedded G-Series graphics driver

EVALUATION ORDER INFORMATION

- AMD OPN: DBFT1-00-E1-EVAL-KT
 - G-Series Model
 - AMD G-T56N (18W, 1.6 GHz DC) with AMD Radeon™ HD 6310 APU
- AMD OPN: DBFT1-01-E1-EVAL-KT
 - G-Series Model
 - AMD G-T40N (9W, 1.0GHz DC) with AMD Radeon™ HD 6250 APU



www.amd.com/embedded

¹: RAID only available on units built with A55E controller hub.

