

EB900

(105mm x 105mm board)

AMD eBrazos Platform

Engineering Specification

Revision History

Revision	Date	Description	Remark
0.1- Mod(0)	2010/09/28	- Initial	Based on TacitRadiance
0.1- Mod(1)	2010/10/13	- Modified	

Issued by: Dwight Looi (USA) / Wilson Lin (HQ)

Date: Sep. 28th, 2010

Engineer: SP Fan

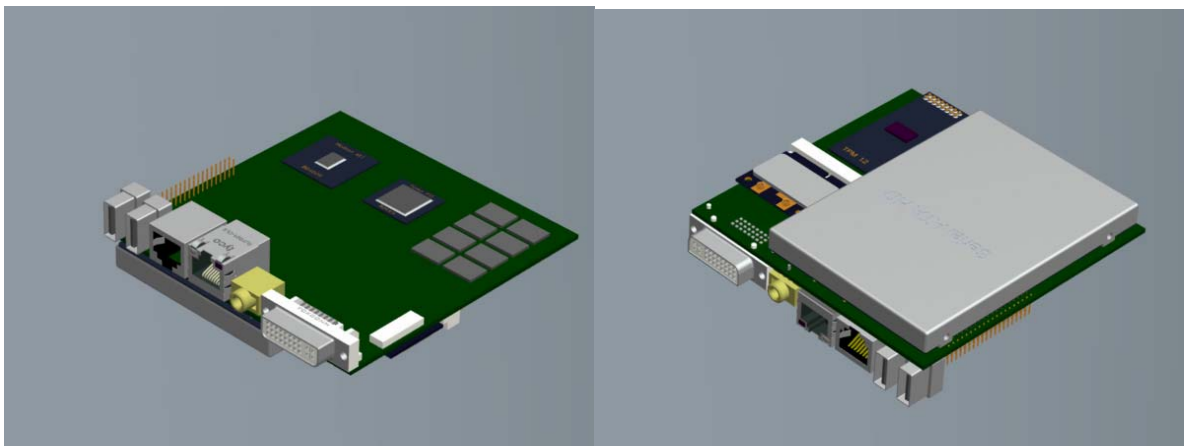
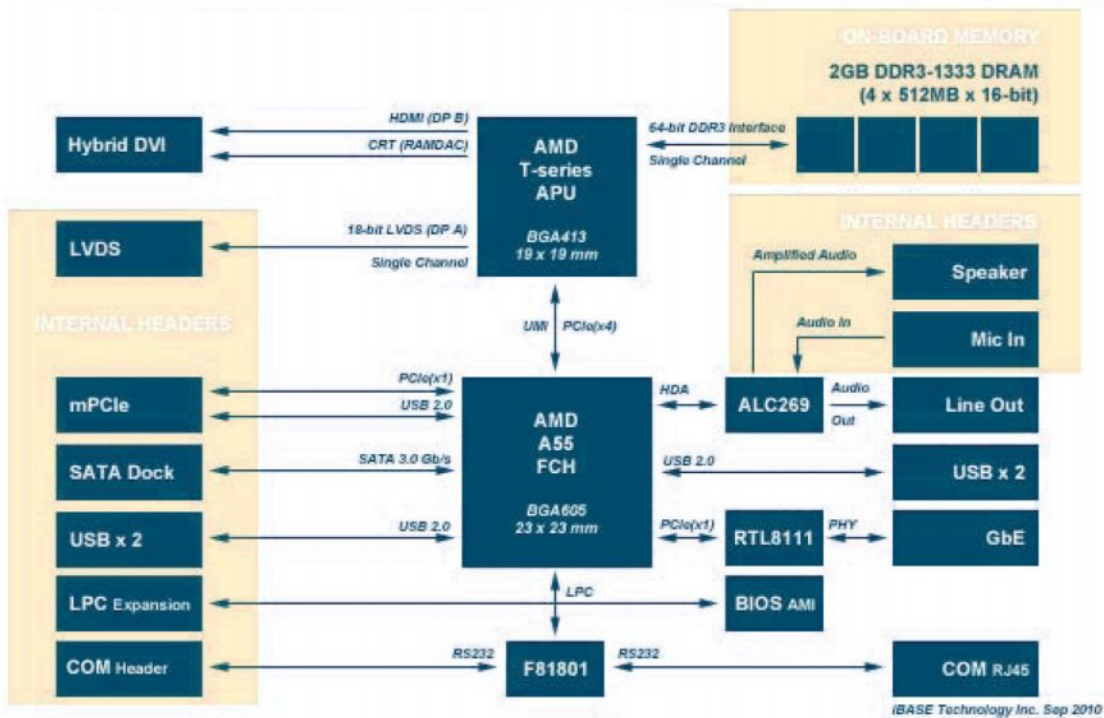
Version: A1

Engineer Specifications

Product Name	EB900
Form Factor	E105 (Embedded 105)
APU Type Operating Frequency	AMD eOntarion G-Series Dual "Bobcat " Core Fusion Processor, 40nm Bulk Package= FT1, 413-BGA , 19 x 19 mm T56N=1.6GHz @ 18W TDP T48N=1.4GHz @ 18W TDP T40N=1.0GHz @ 9W TDP
Cache	L1 = 64KB L2 = 512KB*2
Chipset	AMD A55E "Hudson -E1" Fusion Controller Hub Package= 605-FCBGA , 23 x 23mm TDP=6W (Max.)
BIOS	AMI BIOS
Memory	APU on-die memory controller DDR3-1333 for T56NT/48N; DDR3-1066 for T40N 2GB memory onboard (4 x 256Mb x 16-bit), Single-Channel Non-ECC, 1.5V
Video	G-series APU on-die ATi Radeon "Evergreen" DirectX 11 IGX <ul style="list-style-type: none"> o LVDS x 1 (1st DP supporting LVDS) o Hybrid DVI-I x 1 (2nd DP supporting HDMI + RAMDAC supporting CRT) o Full-HD HD video Decode (H.264/MPEG-4/ VC-1)
LAN	Realtek 8111E GbE LAN x 1
USB	A55E FCH built-in USB 2.0 host controller supporting 5 ports <ul style="list-style-type: none"> o 2 x USB 2.0 (external) o 2 x USB 2.0 (internal) o 1 x mini PCIe embedded USB link
Serial ATA Ports	1 x SATA 2.5" HDD/SSD Dock
Audio	A55E FCH built-in HDA interface w/Realtek ALC269 2.0 channel Audio Codec
LPC I/O	Fintek F81801-I COM1 / COM2 (RS232 only)
Remote On/Off Control	MSP430F2330 + M41T81
Edge I/O	E105 Standardized External I/O <ul style="list-style-type: none"> o DVI (DVI-I; DVI + CRT) o Audio out (Line-out) o GbE (RJ45) o COM1 (Yost type; RS232) o USB 2.0 High Speed x 2 (Type "A"; Female)
Headers	E105 Standardized Internal I/O Header <ul style="list-style-type: none"> o COM (RS232) o 2.0 Channel Audio (Mic-in) o 2.0 Channel Audio (Speaker Level 2.3W, ALC-269 integrated amplifier) o USB x 2 (USB 2.0 High Speed) o PWR o RST o PWR-LED o SATA-LED o 3-pin FAN header o 2-pin header for DC-in (12V @ 5A Max.) E105 Standardized LCD interface (LVDS or eDP) <ul style="list-style-type: none"> o DF-13 LVDS (Single Channel, 18-bit only) E105 Standardized Expansion Interface <ul style="list-style-type: none"> o Half-Mini PCIe(x1) slot [USB + PCIe(x1), 26.8mm x 30 mm] o LPC expansion connector
Power	12V DC-IN
Board Size	105 x 105 mm



EB900 - AMD Brazos Platform E105 SBC Functional Diagram



E105 - eBrazos

Dimensions

