



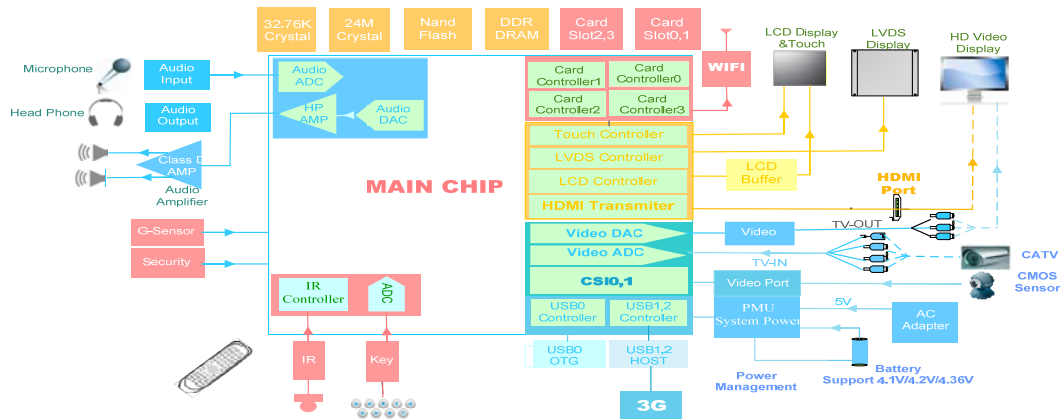
A1X

Connected Smart HD Many Core SoC with High Profile

Overview

With the **best-in-class many core A1X**, Pad and HDTV devices can bring end-users **better experiences of surfing, watching, gaming and reading**. It supports **1080P 3D video playback** as well as **3D gaming**. It offers both **local 2160P video playback** through SATA/USB2.0 interface and

1080P internet video playback through Ethernet /WIFI. What's more important, A1X has **integrated Video Codec, Audio Codec, HDMI,SATA,RTC** which allows products with A1X to be launched in less time, with less effort and at a lower total system cost.



Features

VPU

- HD Video Decoding (**Super HD 2160P/3D Film**)
Support all popular video formats, including **VP8 AVS**, H. 264 MVC ,VC-1, MPEG-1, 2,4, ...
- HD Video Encoding (H.264 High Profile)
Support encoding in H.264 format
1080p @ 60 fps
720p @ 100 fps

DPU

- **MULTI-CHANNEL of HD displays**
Built-in HDMI v1.3/v1.4
YPbPr, CVBS,VGA
LCD interfaces: CPU, RGB, LVDS up to Full HD

CPU/GPU

- **ARM Cortex-A8 CPU**
- 32KB I-Cache/32KB D-Cache
- **256KB L2 Cache**
- **MALI 400 MP GPU**

Memory

- **DDR2,DDR3** SDRAM, 32-bit
Frequency up to **DDR800**
Memory Capacity up to **16G bits**
- SLC/MLC/**TLC/DDR** NAND
8 flash chips, ECC 64bits
Memory Capacity up to **64GB**
Support NAND of 5nm, 4nm, 3nm, 2nm...
Support NAND of Samsung, Toshiba, Hynix...



Rich Connectivity

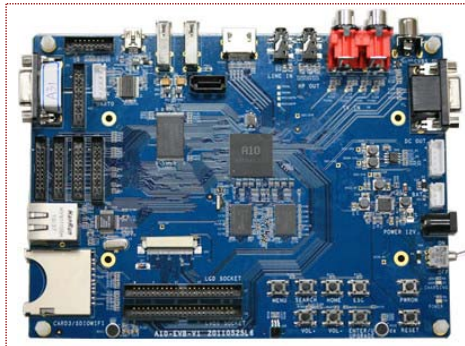
- **THREE USB2.0 Port (OTG/HOST)**
- CSI(2), TS(2)
- SD Card3.0(4)
- 10/100 Ethernet controller
- CAN Bus, **Built-in SATA2.0** Interface
- I2S, SPDIF and AC97 audio interfaces
- PS2 (2), SPI (4), TWI (3) and UART (8)

Boot Devices

- NAND FLASH
- SPI NOR FLASH
- SD Card
- USB

Powerful Acceleration

- Graphic(**2D/3D,Mali400 MP**)
- VPU(**Super HD**)
- APU
- E-reader
Support text in EPUB, PDF, FB2, PDB, CHM, HTML, TXT
Support coding format in ANSI/ASCII, UTF-8, UTF16-BE, UTF16-LE, GB2312, EUC-KR, SHIFT-JIS, Windows-1250/1251
Support Chinese, English, French, Italian, Spanish, Dutch, Russian, Japanese, and Korea



Applications

- Cool Pad
- Smart Phone
- Smart TV
- In-Car Infotainment Products
- IP-Cam, DVS Smart Box
- Home theater products
- Advertising TV, Industrial Computer

Benefits

- Very high performance processing and multimedia capabilities
- Hardware acceleration enables very low power consumption for HD video and graphics
- High level of integration makes you can launch product in less time, with less effort and at a lower total system cost
- Optimized Standard Operation Procedure(SOP) creates high First Pass Yield(FPY) in mass production
- Further development Kits, including OS BSP(**Android2.3.4, Linux2.6, WinCE6.0**)

※ Company Profile

All Winner Technology, established in the year of 2007, is a leading fabless semiconductor company in China. All Winner Technology develops system-on-chip(SoC) for smart connected multimedia devices. We off both highly integrated SoC solution as well as stand-alone chips. In the past few years, All Winner Technology has win great reputation in HD PMP and HD Media box, and currently, is dedicated in the research of connected video, such as **CLOUD Video and CLOUD Device System Solution**.

Learn More: For more information about All Winner Technology products and documentation, please contact us via service@allwinnertech.com.