

ARM11 CPU Module For 1080p Applications

T89_DVK – High performance ARM11 computer board

T89_DVK Kit

The T89_DVK (T89 Development Kit V1.0) is a compact ARM11 computer board with a rich set of features. It is a flexible, high performance and inexpensive development board designed for multimedia applications especially in 1080p video playback.

The T89_DVK hardware is comprised of a CPU card, a baseboard and a 7-inch TFT LCD display. Each T89_DVK can be pre-installed with either Windows CE 6.0 or Linux 2.6 OS for immediate evaluation.

CPU Module

The CPU module PCB0A100 has a small form factor, low power consumption and high performance. The on-board ARM1176JZF processor runs at 700Mhz.

TFT-LCD Display

The kit comes with a 7-inch LCD module using 800x480 resolution and a 4-wire resistive type touch screen to make evaluation and development tasks easier.

Full HD

1080



T89_DVK WinCE screen shot

Building Your Products

The possible options to build your product hardware are:

- Use the full T89_DVK kit to build a product.
- Combine the T89_DVK kit and a customized expansion board to make a complete product.
- Combine the PCB0A100 CPU module and a customized base board to make a complete product.

T89_DVK --- High Performance ARM11 Computer Board with 1080p Video

CPU Module Specifications

CPU

ARM1176JZF @ 700Mhz
 16KB/16KB cache,
 16KB/16KB TCM

Memory

256MB DDR2 SDRAM (32-bit)
 512MB NAND Flash (8-bit)

Bus / Interfaces / IO

LCD Interface
 8-bit system bus
 LVDS Interface
 HDMI 1.3c Interface
 TV out Interface
 SATA / SD-MMC
 USB2.0 OTG
 Touch Panel Interface
 10/100 Ethernet Interface

Bus / Interfaces / IO

Camera Interface
 I²S / I²C / UART
 PWM / RTC / GPIO

Supported OS

WinCE 6.0 R3 Core
 Linux 2.6

Video File Format

3GP, 3G2 (H.263)
 MPG, VOB, TS, TP (MPEG1/2)
 AVI, MP4 (MPEG4)
 AVI, MP4, MOV, MKV (H.264)

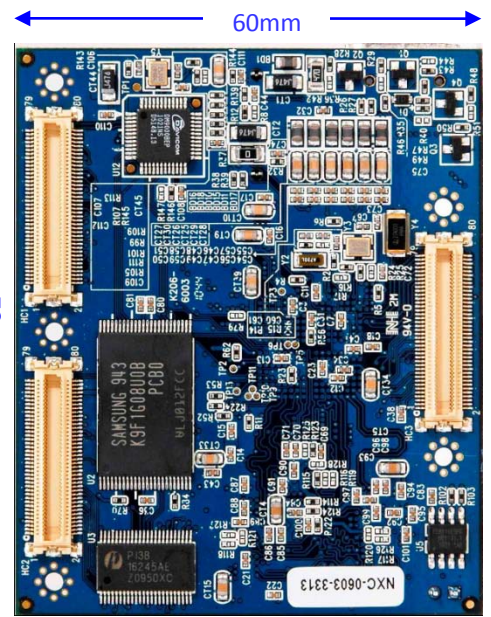
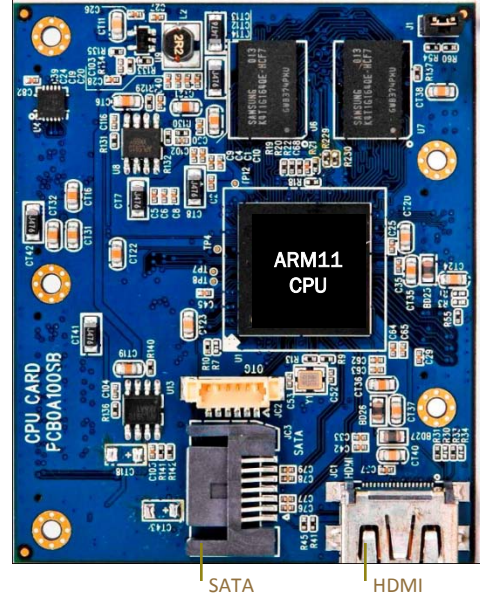
Power Supply

+5V
 +3.3V

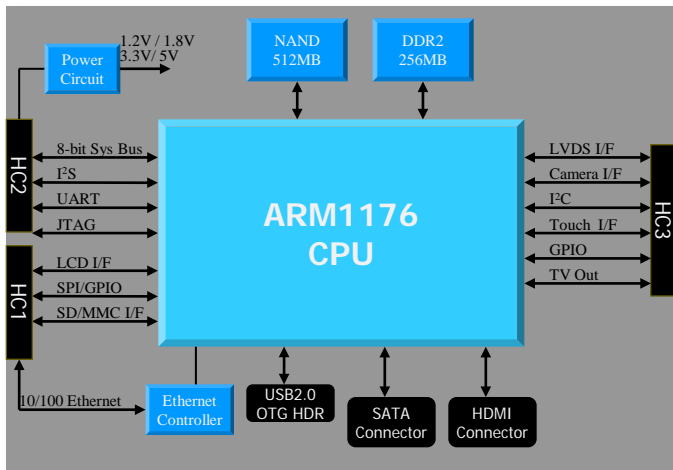
Dimension

60 mm x 73 mm

(Top View)



(Bottom View)



PCB0A100 CPU Module Block Diagram

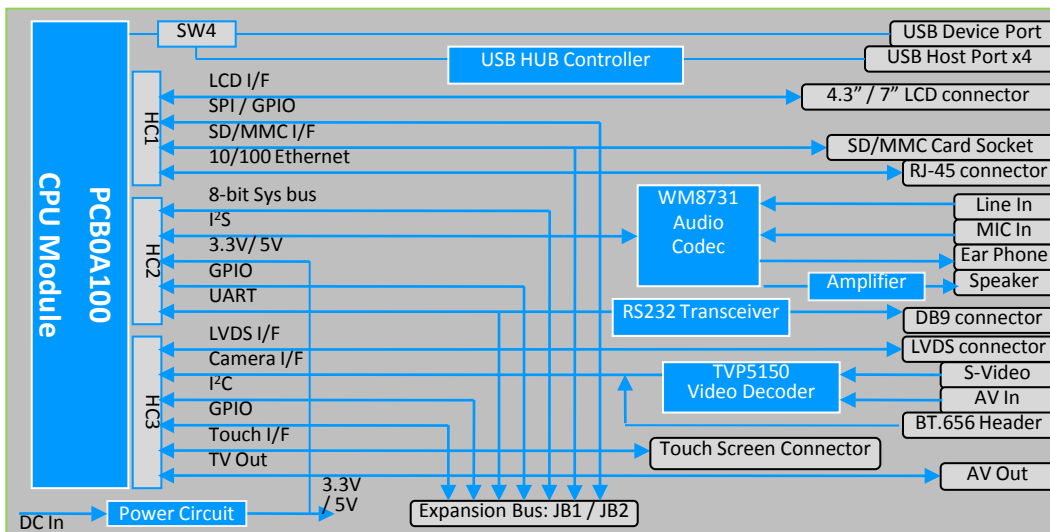
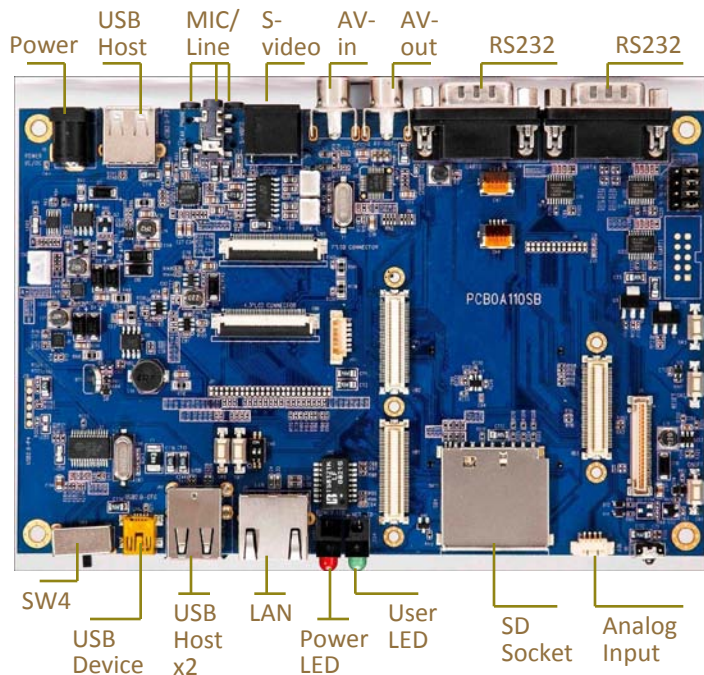
T89_DVK --- High Performance ARM11 Computer Board with 1080p Video

Base Board Specifications

The baseboard is a standard reference environment. It is designed to externally expose the I/O interfaces from CPU Card. Board dimensions are 110mmx170mm.

The I/O and interface features built on the baseboard are:

1. LCD connectors
2. Touch Screen connectors
3. HDMI connector x1 (on CPU card)
4. SATA connector x1 (on CPU card)
5. USB2.0 Host x3
6. USB2.0 Device x1
7. SD/MMC card holder x1
8. MIC / Ear Phone / Line I/O / Speaker
9. 10/100 Ethernet RJ45 connector
10. Camera Input header x1
11. Video I/O connector
12. RS232 (DB9) x2
13. Expansion Bus Header x2
(8-bit SRAM-like i/o bus, UART, 2C, GPIO,..etc)



Base Board Block Diagram

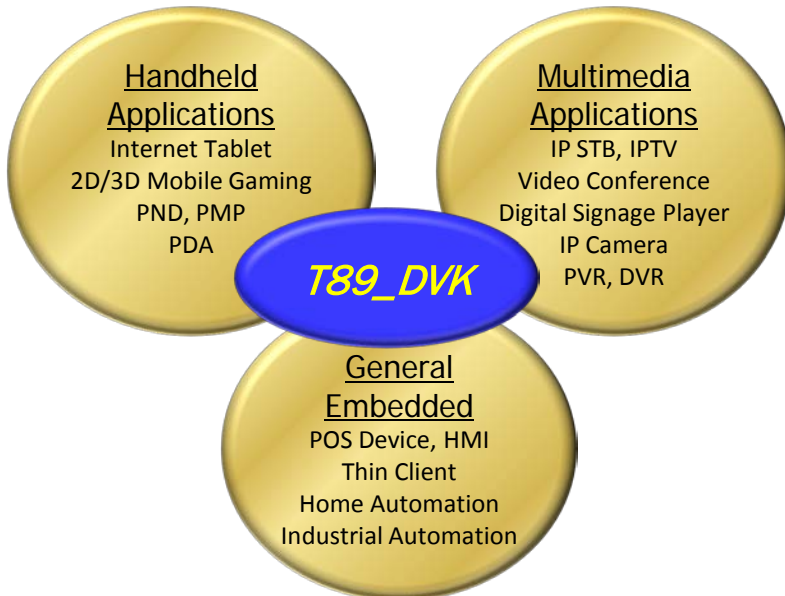
T89_DVK --- High Performance ARM11 Computer Board with 1080p Video

Customization Services

We provide a design service to speed up your product development and meet your product requirements. These services may include:

- Hardware design (baseboard, expansion board or customized module)
- Linux or Windows CE device driver development

T89_DVK Target Applications



Ordering Information:

T89_DVK Package Content --

1 x CPU Card
1 x Base Board
1 x 7-inch LCD module (800x480)
1 x Power Adapter
1 x CD (software, manual)
1 x Windows CE License Number

T89_DVK --

Part No.	Descriptions
T89_DVK	T89 Development Kit 1.0

CPU Module --

Part No.	Descriptions
PCB0A100	ARM1176JZF CPU, 256MB DDR2 SDRAM, 512MB NAND Flash, 10/100 Ethernet



IC Nexus Co. Ltd.

6F-1, No.3-2 Park Street, NanKang
Software Park, Taipei 115, Taiwan
Tel : +886-2-2789 1200
E-Mail: sales@icnexus.com.tw
Web: www.icnexus.com.tw

Authorized Distributor :

ACTRON AG
Posthaltering 18
D-85599 Parsdorf
Tel.: +49 (0)89 991509-0
E-Mail: service@actron.de
Web: www.actron.de

