









# KiwiBoard for Makers

Android + Open Hardware





#### What's KiwiBoard

An open hardware runs Android 4.0

UART, GPIO, ADC, PWM for sensors and extensions

USB WIFI, USB 3G for Internet connections

USB Camera for video recording

USB memory, SD card and internal flash for more data storage

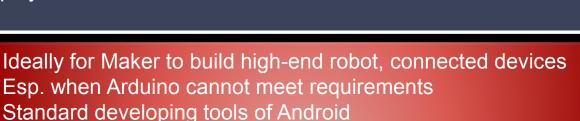
USB Mouse, Keyboard for easy testing and debugging

VGA/HDMI/LCD for GUI display

MIC for voice input

ARM Cortex A8 core

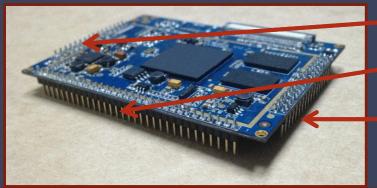
1080P video decoding





### **Outlook**

### Size: 76mm\*55mm

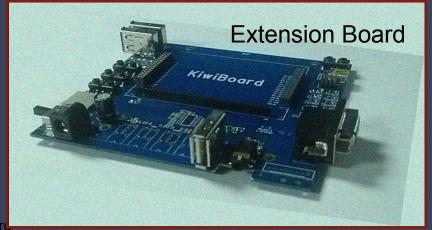


Interface Group 1: 16\*2 PIN

Interface Group 2: 32 PIN

Interface Group 3: 16\*2 PIN

PIN distance: 2.0mm



#### back view



www.kiwiboard.org

#### **Interfaces**

12V power input 5V 3.3V power output

GPIO – 10

ADC - 2

PWM - 2

AUDIO\_OUT – Stereo

AUDIO\_IN - 2

UART – 4

SPI – 1

**VGA - 1** 

HDMI/LCD: connector

SD Card: 1

USB HOST – 2

USB DEVICE - 1

## Ready devices

Works for standard Android Java Applications

Works for Android Java Application via JNI or NDK C/C++ program

On Board:

VGA output PINs Speaker Stereo

MIC for voice record, speech recognition

GPS(Ready, HW Optional)

**UART** 

**GPIO** 

ADC

**PWM** 

**USB Host devices** 

USB hard disk/memory stick

USB Keyboard, mouse(HID)

**USB** Camera

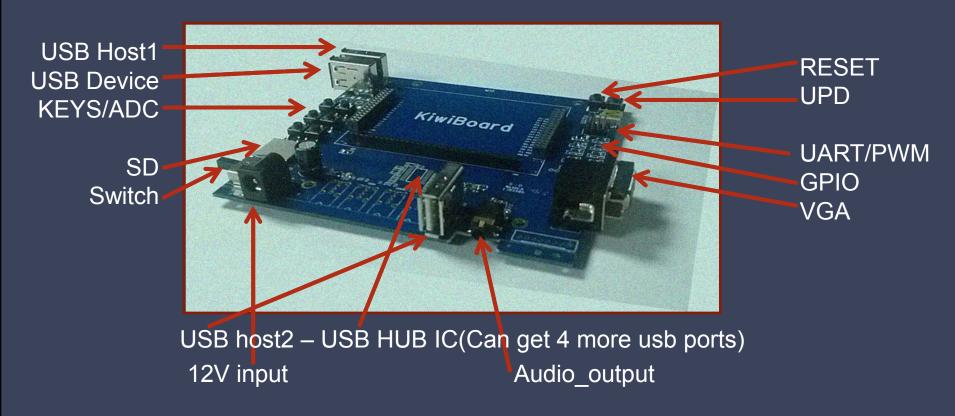
Internet Connections

USB wifi

USB 3G+ dongle

**USB** Ethernet

# **Easy Start Extension Board**



## **Software Development tools**

Android SDK

http://developer.android.com/sdk/index.html

Android NDK

http://developer.android.com/tools/sdk/ndk/index.htm

Python for Android

http://python-for-android.readthedocs.org/en/latest/

**DDMS** 

http://developer.android.com/tools/debugging/ddms.html

**ADB** 

http://developer.android.com/tools/help/adb.html

**Training** 

<u> http://developer.android.com/training/index.html</u>



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