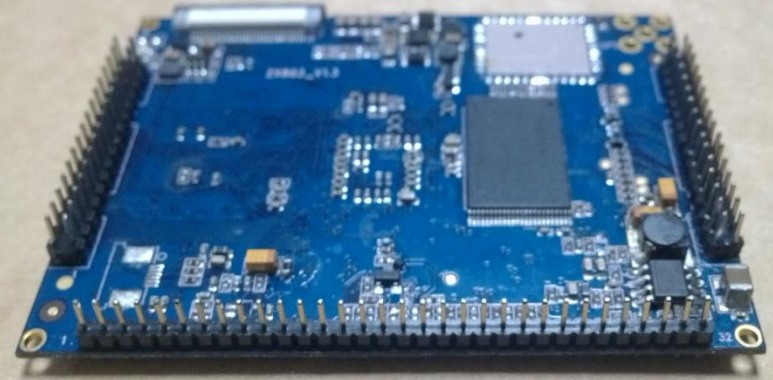# KiwiBoard for Makers

Power of Android and Arduino

What's KiwiBoard

Android 4.0 + Arduino compatible control software

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(Optional HDMI/LCD) for GUI display
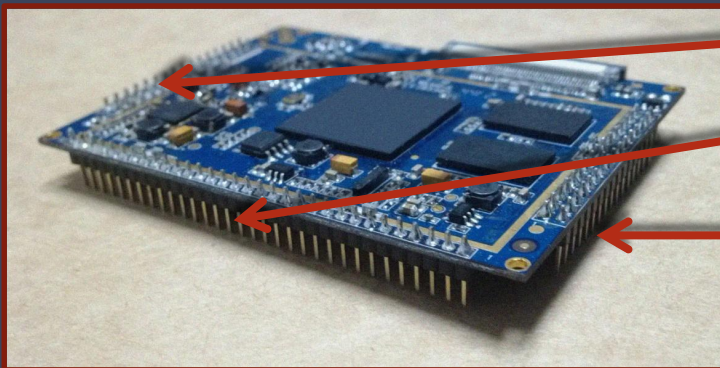
MIC for voice input

ARM Cortex A8 core

1080P video decoding

Ideally for Maker to build high-end robot, connected devices
Esp. when Arduino cannot meet requirements
Standard developing tools of Android

Outlook

Interface Group 1: 16*2 PIN

Interface Group 2: 32 PIN

Interface Group 3: 16*2 PIN

PIN distance: 2.0mm

Size: 76mm*55mm

Smaller than a credit card

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

    On Board:
        VGA output PINs
        Speaker Stereo
        MIC for voice record, speech recognition
        GPS(Ready, HW Optional)

    USB Host devices
        USB hard disk/memory stick
        USB Keyboard, mouse(HID)
        USB Camera
        Internet Connections
            USB wifi
            USB 3G+ dongle
            USB Ethernet

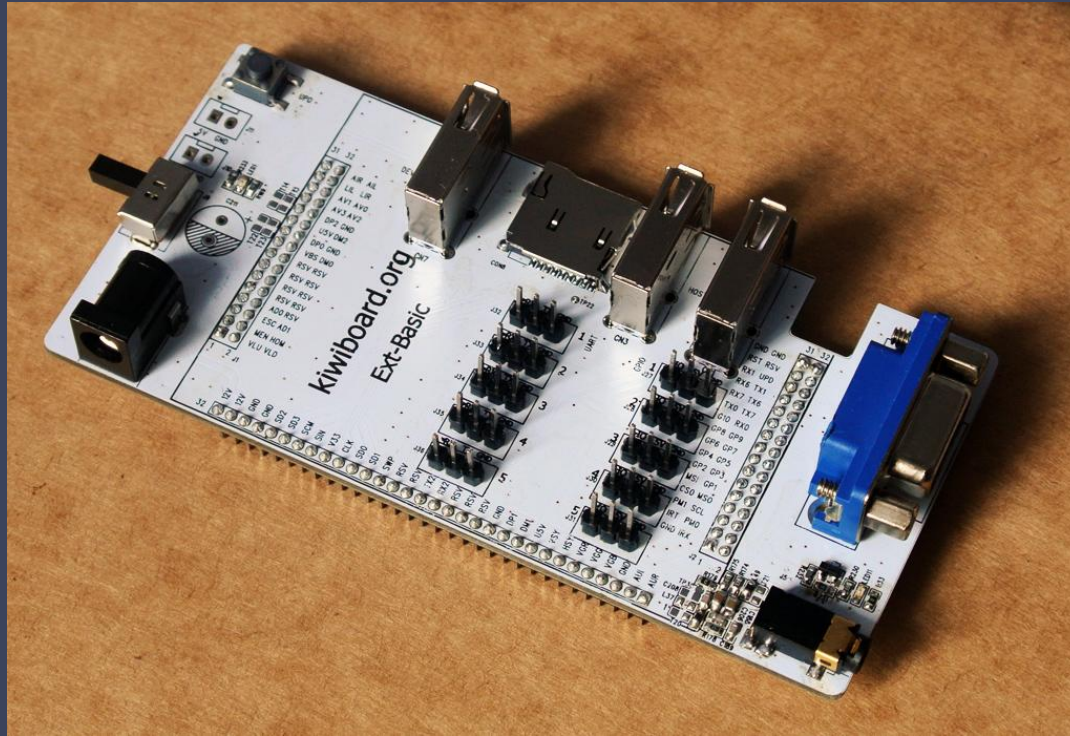Works for Android Java Application via JNI or NDK C/C++ program

    UART
    GPIO
    ADC
    PWM

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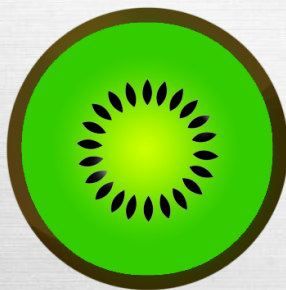http://developer.android.com/training/index.html

KiwiBoard

Power of Android and Arduino

www.kiwiboard.org