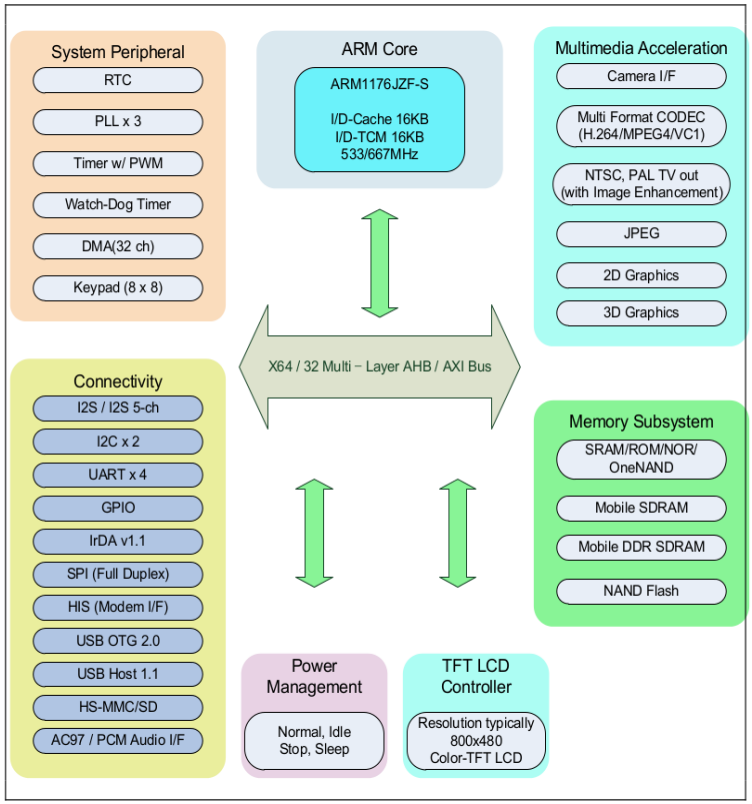
ARM11 Architecture

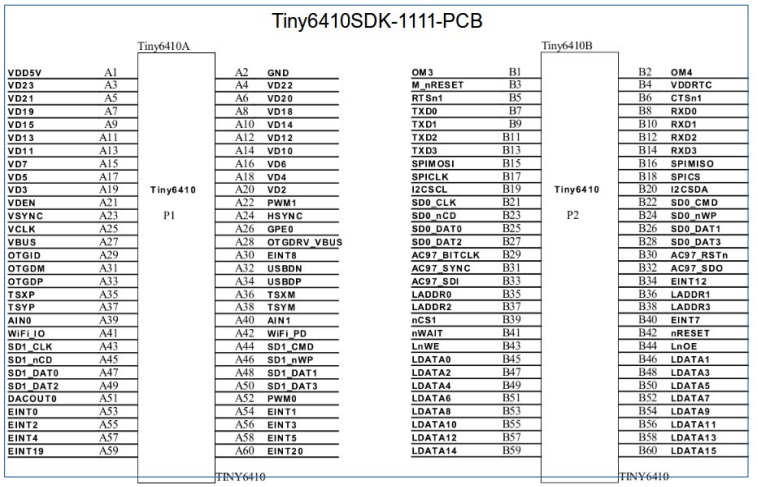
CPU Block Diagram



Memory Map (Partial)

Start Address	End Address	Int. ROM	Stepping Stone (NAND Ctrl.)	SROM Ctrl.	One NAND Ctrl. 0	One NAND Ctrl. 1	DRAM Ctrl 1
0x00000000	0x07FFFFFF	O[1]	-	O[1]	O[1]	-	-
0x08000000	0x0BFFFFFF	O	-	-	-	-	-
0x0C000000	0x0FFFFFFF	-	O	-	-	-	-
0x10000000	0x17FFFFFF	-	-	O	-	-	-
0x18000000	0x1FFFFFFF	-	-	O	-	-	-
0x20000000	0x27FFFFFF	-	-	O[2]	O[2]	-	-
0x28000000	0x2FFFFFFF	-	-	O[2]		O[2]	-
0x30000000	0x37FFFFFF	-	-	O	-	-	-
0x38000000	0x3FFFFFFF	-	-	O	-	-	-
0x40000000	0x47FFFFFF	-	-	-	-	-	-
0x48000000	0x4FFFFFFF	-	-	-	-	-	-
0x50000000	0x5FFFFFFF	-	-	-	-	-	O
0x60000000	0x6FFFFFFF	-	-	-	-	-	O

Connector information



GPIO Special Purpose Registers

PortName	Number of Pins.	Muxed pins	Power Inform.
GPA port	8	UART/EINT	1.8~3.3V
GPB port	7	UART/IrDA/I2C/CF/Ext.DMA/EINT	1.8~3.3V
GPC port	8	SPI/SDMMC/I2S_V40/EINT	1.8~3.3V
GPD port	5	PCM/I2S/AC97/EINT	1.8~3.3V
GPE port	5	PCM/I2S/AC97	1.8~3.3V
GPF port	16	CAMIF/PWM/EINT	1.8~3.3V
GPG port	7	SDMMC/EINT	1.8~3.3V

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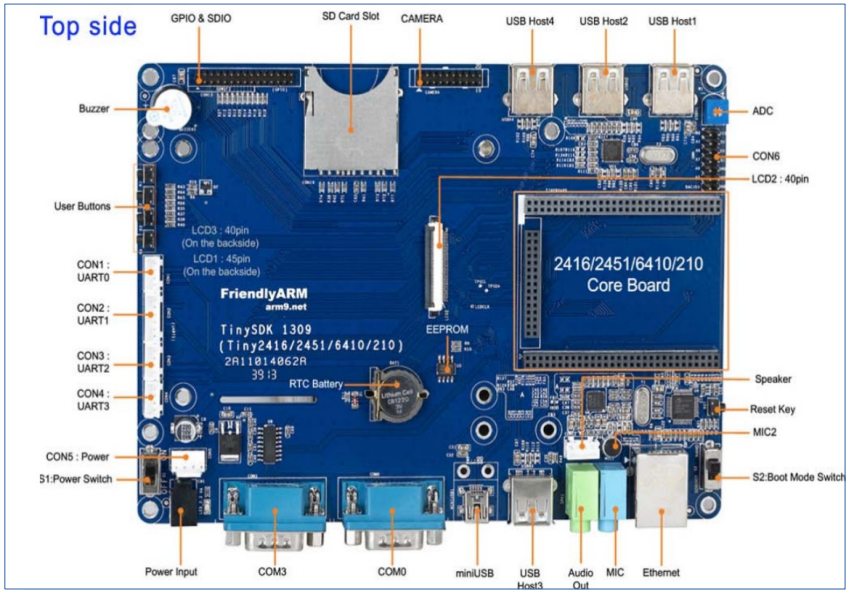
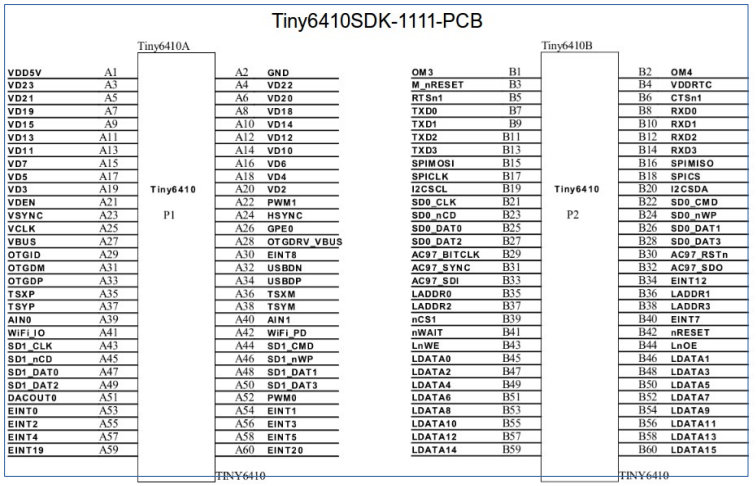
Process for GPIO Testing

Development Kit → Schematic of the development kit





Connector information

Device driver

User space: user application program, compile and build the executable

Kernel space:
Device driver example code from source distribution

Modify menuconfig script

Compile and build device driver module

Upload the device driver module and user application program to the target platform

$insmod device-driver.ko
Then run the user application program

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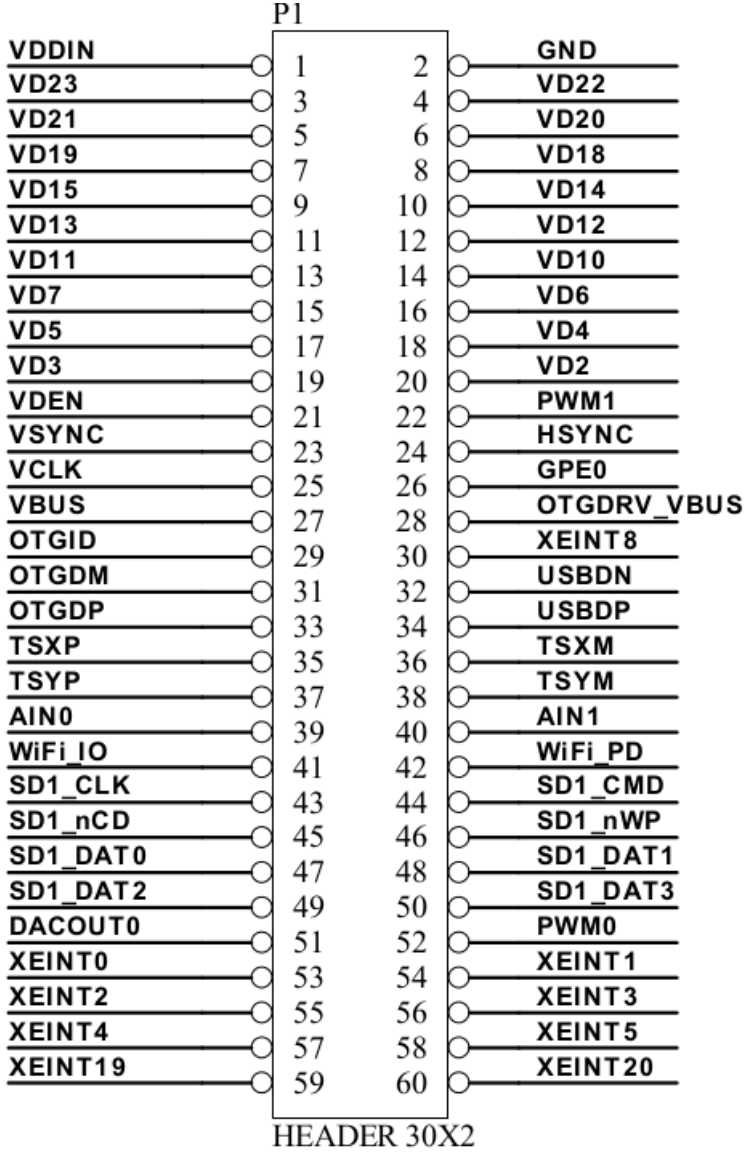
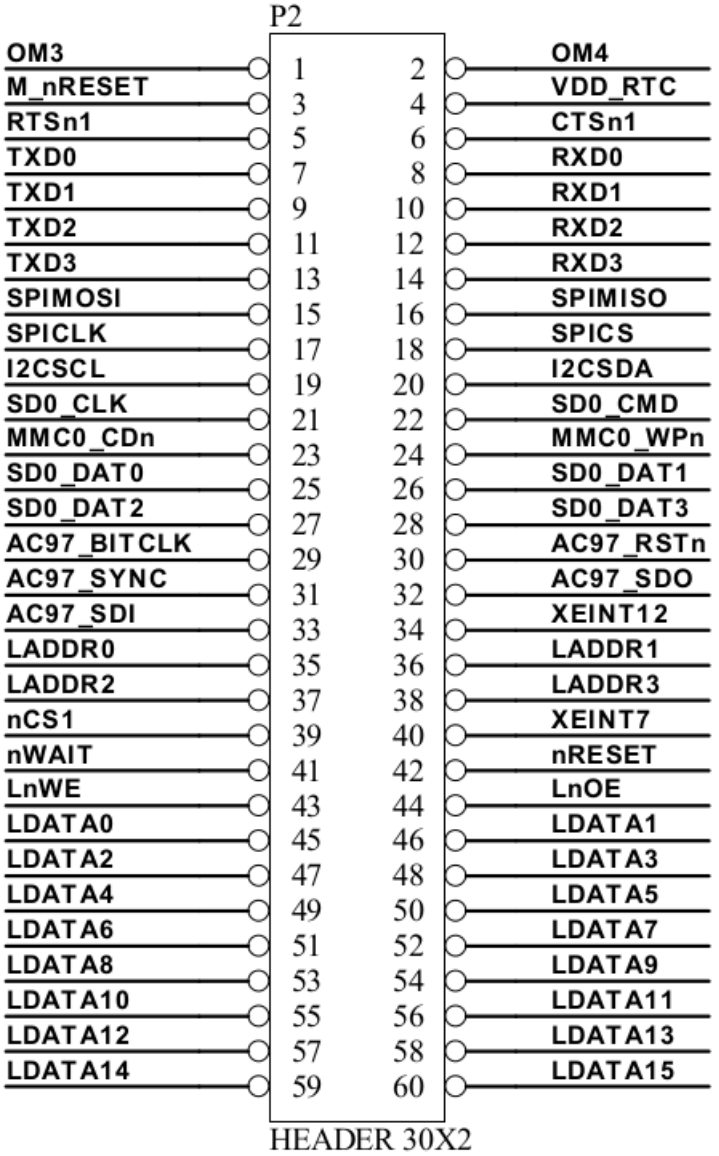
ARM11 6410 Connectors

Tiny6410-1107





ARM11 6410 Connectors

Tiny6410SDK-1111-PCB