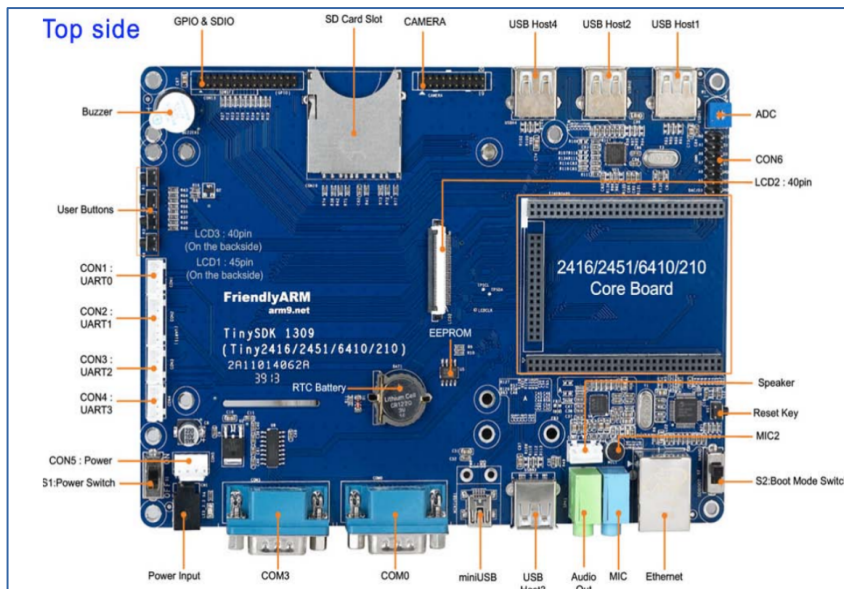


# Process for GPIO Testing

Development Kit → Schematic of the development kit



Tiny6410SDK-1111-PCB

Tiny6410A				Tiny6410B			
VDD5V	A1	A2	GND	OM3	B1	B2	OM4
VD23	A3	A4	VD22	M_nRESET	B3	B4	VDDRTC
VD21	A5	A6	VD20	RTSn1	B5	B6	CTSn1
VD19	A7	A8	VD18	TXD0	B7	B8	RXD0
VD15	A9	A10	VD14	TXD1	B9	B10	RXD1
VD13	A11	A12	VD12	TXD2	B11	B12	RXD2
VD11	A13	A14	VD10	TXD3	B13	B14	RXD3
VD7	A15	A16	VD6	SPIMOSI	B15	B16	SPIMISO
VD5	A17	A18	VD4	SPICLK	B17	B18	SPICCS
VD3	A19	A20	VD2	I2CSCL	B19	B20	I2CSDA
VDEN	A21	A22	PWM1	SD0_CLK	B21	B22	SD0_CMD
VSYNC	A23	A24	HSYNC	SD0_nCD	B23	B24	SD0_nWP
VCLK	A25	A26	GPE0	SD0_DAT0	B25	B26	SD0_DAT1
VBUS	A27	A28	OTGDRV_VBUS	SD0_DAT2	B27	B28	SD0_DAT3
OTGID	A29	A30	EINT8	AC97_BITCLK	B29	B30	AC97_RSTn
OTGDM	A31	A32	USBDM	AC97_SYNC	B31	B32	AC97_SDO
OTGDP	A33	A34	USBOP	AC97_SDI	B33	B34	EINT12
TSXP	A35	A36	TSXM	LADDR0	B35	B36	LADDR1
TSYP	A37	A38	TSYM	LADDR2	B37	B38	LADDR3
AIN0	A39	A40	AIN1	nCS1	B39	B40	EINT7
WIFI_IO	A41	A42	WIFI_PD	nWAIT	B41	B42	nRESET
SD1_CLK	A43	A44	SD1_CMD	LnWE	B43	B44	LnOE
SD1_nCD	A45	A46	SD1_nWP	LDATA0	B45	B46	LDATA1
SD1_DAT0	A47	A48	SD1_DAT1	LDATA2	B47	B48	LDATA3
SD1_DAT2	A49	A50	SD1_DAT3	LDATA4	B49	B50	LDATA5
DACOUT0	A51	A52	PWM0	LDATA6	B51	B52	LDATA7
EINT0	A53	A54	EINT1	LDATA8	B53	B54	LDATA9
EINT2	A55	A56	EINT3	LDATA10	B55	B56	LDATA11
EINT4	A57	A58	EINT5	LDATA12	B57	B58	LDATA13
EINT19	A59	A60	EINT20	LDATA14	B59	B60	LDATA15

Connector information

Device driver

Modify menuconfig script

Compile and build device driver module

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

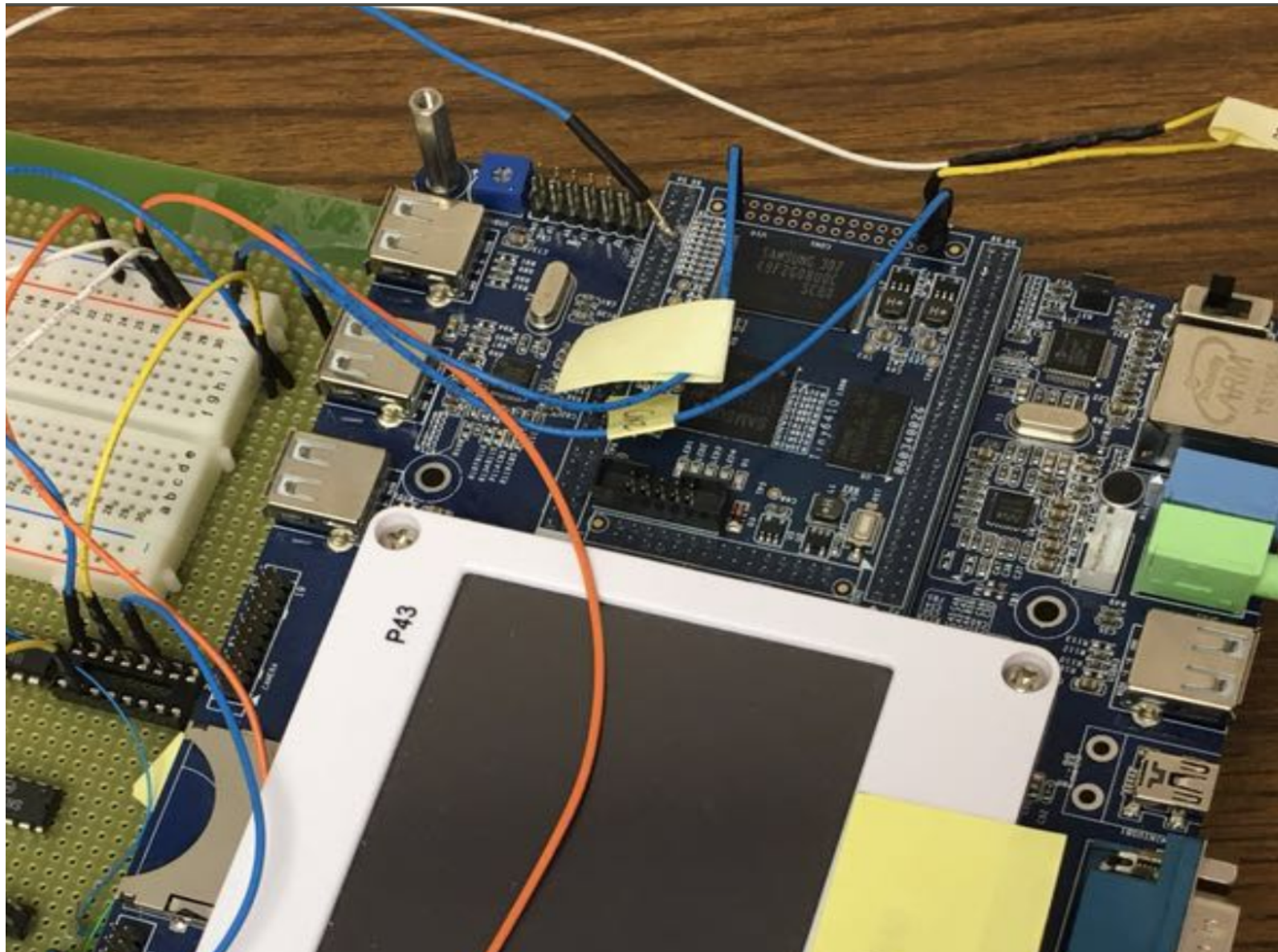
\$insmod device-driver.ko

Then run the user application program

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

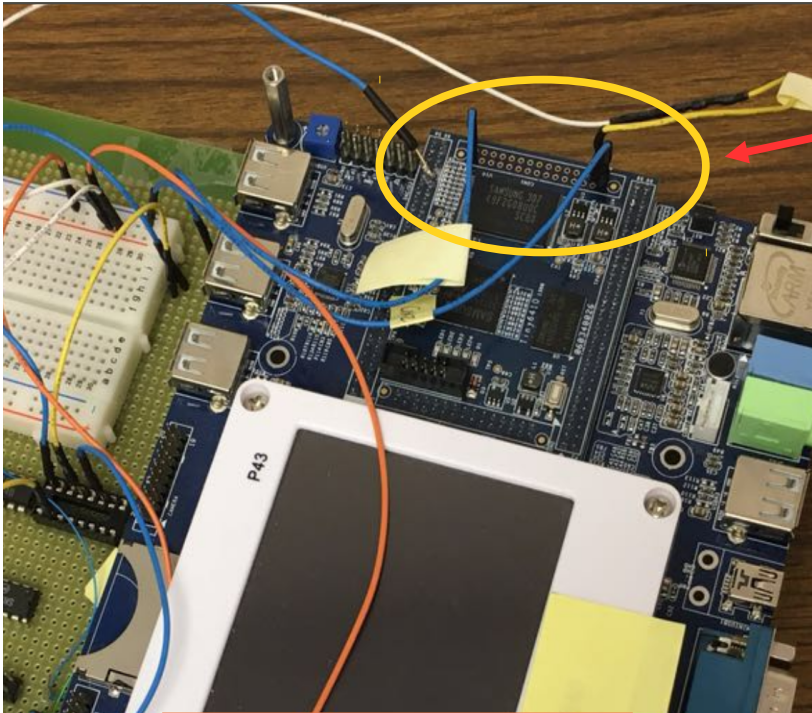
Kernel space: Device driver example code from source distribution

# Hardware Pin Connections For HW1

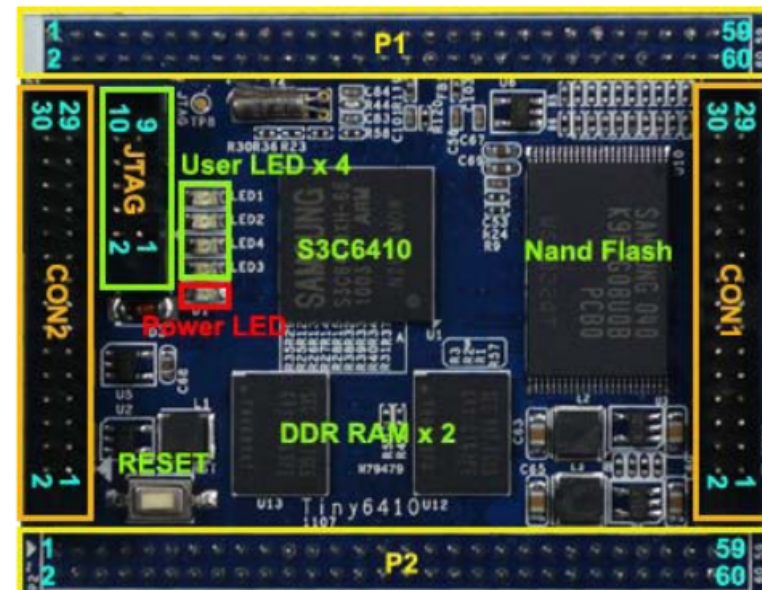




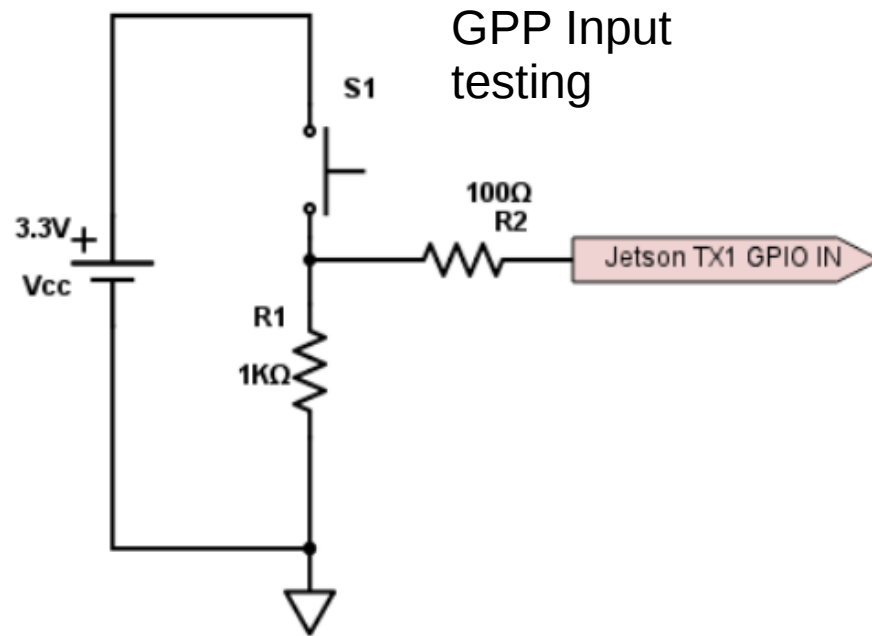
# Identify GPP Port From CON1 Connector



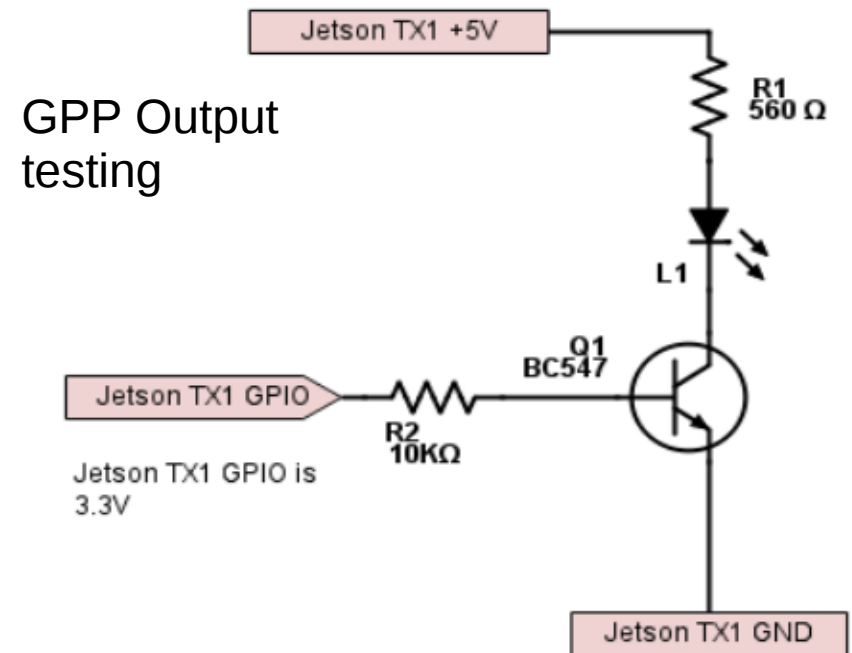
CON1.5	GPE3		CON1.6	GPE4
CON1.7	GPM0		CON1.8	GPM1
CON1.9	GPM2		CON1.10	GPM3
CON1.11	GPM4		CON1.12	GPM5
CON1.13	GPQ1		CON1.14	GPQ2
CON1.15	GPQ3		CON1.16	GPQ4
CON1.17	GPQ5		CON1.18	GPQ6
CON1.19	SPICLK0		CON1.20	SPIMISO0
CON1.21	SPICS0		CON1.22	SPIMOSI0
CON1.23	EINT6		CON1.24	EINT9
CON1.25	EINT11		CON1.26	EINT16
CON1.27	EINT17		CON1.28	AIN2
CON1.29	AIN3		CON1.30	DACOUT1



# ARM11 6410 Input/Output Testing



**Schematic GPIO Jetson TX1**



**Jetson TX1 GPIO LED Interface**

<http://www.jetsonhacks.com/2015/12/29/gpio-interfacing-nvidia-jetson-tx1/>

Note: this reference design is for Jetson Tx1 but it works for ARM11 board as well.