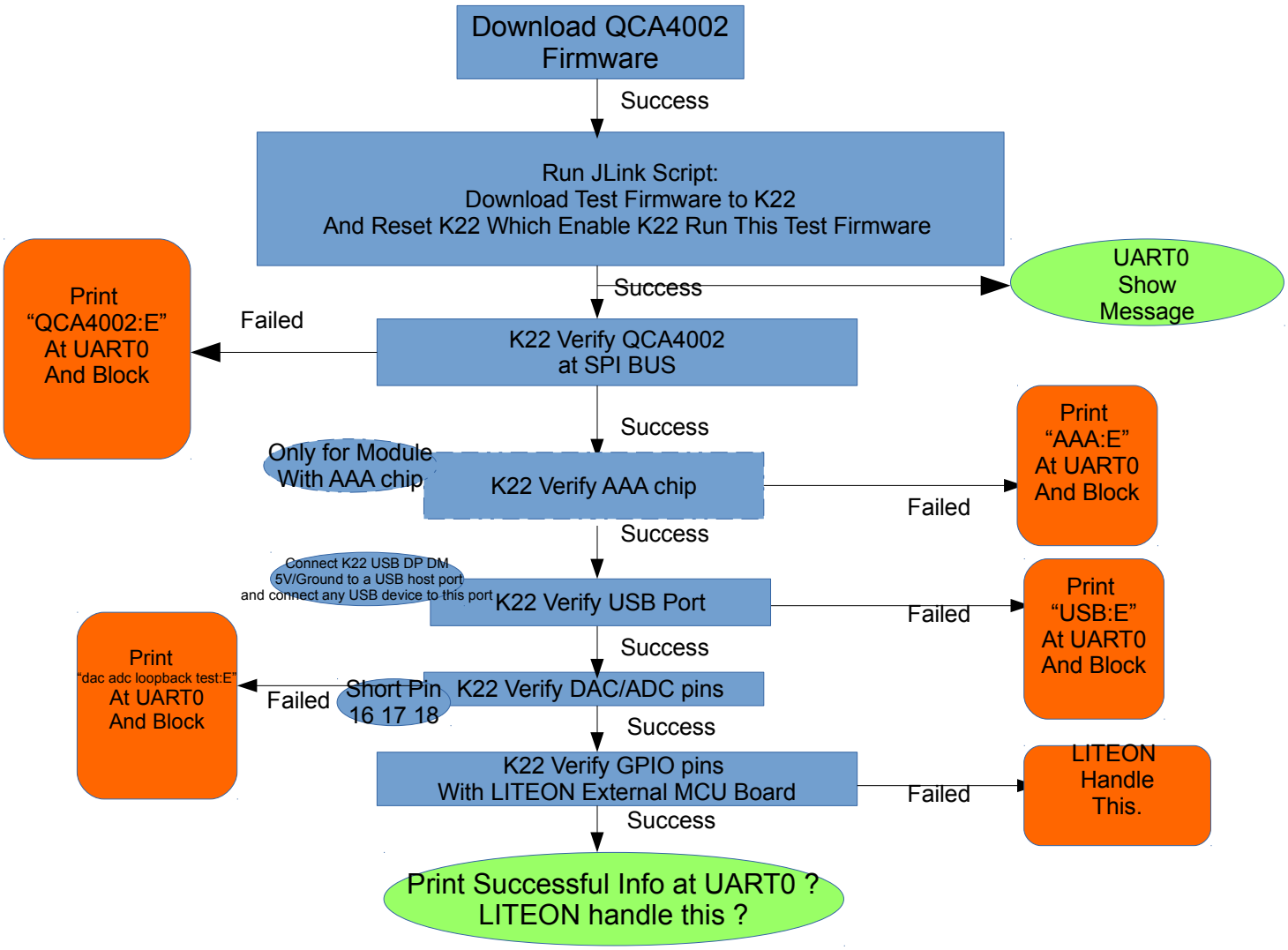
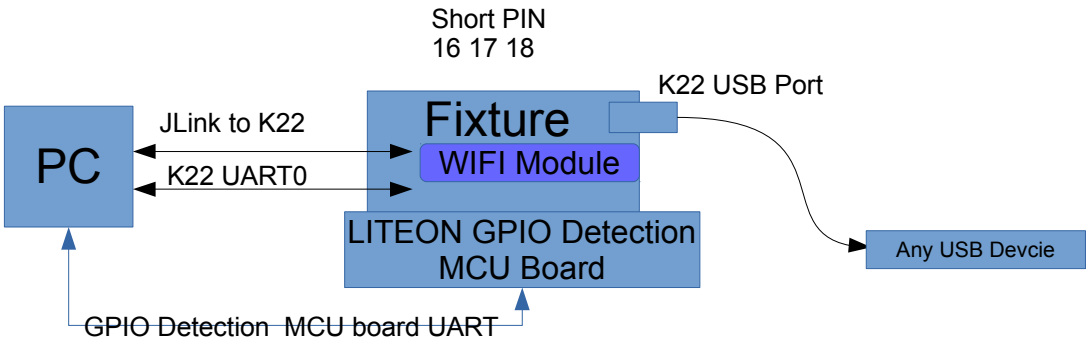


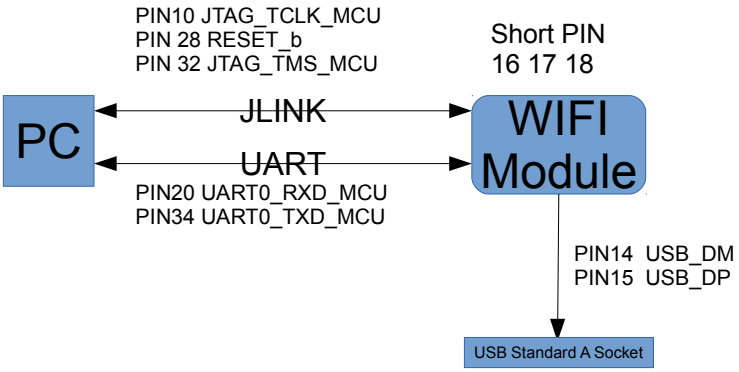


What LITEON need to do for fixture:
Connect K22 UART0 to PC; Connect K22 SWD to JLink; Short K22 AD/DA Pin 16 17 18; Connect K22 USB Port to any USB device.

For every WIFI Module PIN which need be tested
PC send command through K22 UART0 to K22:
Shell> pinverify <pinnumber> <0/1>
LITEON GPIO Detection MCU detect pinxx voltage and feedback to PC through LITEON GPIO Detection MCU UART port.
If this pinxx voltage could match K22 setting, this pinxx is verified successfully.

Power Need verified pin x 28 QCA4002 Pins K22 Firmware download and UART0 K22 Self verified pin

PIN1 Ground
PIN2 SPI_CS_WIFIHM1
PIN3 CHIP_PWD_L
PIN4 USB_DN_KF
PIN5 USB_DP_KF
PIN6 SPI1_CS0_EXT
PIN7 SPI1_SIN_EXT
PIN8 SPI1_SOUT_EXT
PIN9 SPI1_CLK_EXT
PIN10 JTAG_TCLK_MCU
PIN11 JTAG_TDI_MCU
PIN12 I2C_DATA_Host
PIN13 I2C_CLK_Host
PIN14 USB_DM_MCU
PIN15 USB_DP_MCU
PIN16 ADC0_DP0
PIN17 ADC0_DP3
PIN18 DAC0_OUT
PIN19 Ground
PIN20 UART0_RXD_MCU
PIN21 JTAG_TDO_MCU
PIN22 JTAG_TRSTb_MCU
PIN23 EZP_CS_b
PIN24 I2S0_TXD0
PIN25 I2C1_DATA_MCU
PIN26 I2C1_CLK_MCU
PIN27 VDD_MCU
PIN28 RESET_b
PIN29 Ground
PIN30 UART0_RTS_MCU
PIN31 UART0_CTS_MCU
PIN32 JTAG_TMS_MCU
PIN33 I2S0_TX_BCLK
PIN34 UART0_TXD_MCU
PIN35 VDD33
PIN36 SPIM_CS#
PIN37 MCU_GPIO5
PIN38 UART1_RXD_MCU
PIN39 I2S0_TX_FS
PIN40 UART1_TXD_MCU
PIN41 UART1_CTS_MCU
PIN42 UART1_RTS_MCU
PIN43 I2S0_RXD0
PIN44 I2S0_RX_BCLK
PIN45 I2S0_MCLK
PIN46 I2S0_RX_FS
PIN47 Ground



Test procedure for WIFI module pin verify program.
Unzip LITEONPINTest package on PC.

1: Connect test fixture/WIFI module/J-Link/PC/USB device together.
2: Open Serial console on PC for WIFI module.
3: Run flash_pinverify.cmd(flash_pinverify_aaa.cmd) which will download test_wifimodule_k22fsh.bin(test_wifimodule_aaa_k22fsh.bin) to WIFI module K22 flash and run it, it will check QCA4002, ('AAA'), USB pins, DA/AD pins, firstly, QCA4002/('AAA')/USB/DA/AD any failed, serial console will prompt this failure and is blocked.
4: If QCA4002/('AAA')/USB/DA/AD are all verified OK, serial console will prompt “shell>”, now you can input pinverify command, for example :
shell> pinverify 46 1
Set "I2S0_RX_FS" high

5: If all needed verified pins passed, run flash_demo.cmd to download throughput_k22fsh.bin to K22 flash.

Note:
1:When download firmware or boot up/reset K22, pin23 EZP_CS_b must not be pulled low.
2:Cmd and bin suffixed with AAA are only for modules with AAA chip.