PIN\_MUXING\_RUGGEDBOARD\_a5d2x

Step 1 :Cloning the git repository linux-rba5d2x

git clone https://github.com/rugged-board/linux-rba5d2x.git

Step 2 :After clone the git you have to go directory as;

linux-rba5d2x/arch/arm/boot/dts

- vi a5d2x-rugged\_board\_common.dtsi // we have to modify in this device tree file "

For Example:

In RBa52x have expansion header i have to enable the reciver pin for that you have to refer the rba5d2x schematic for which FLEXCOM we have to use

You have to use the FLEXCOM3

flx3: flexcom@fc014000 {

atmel,flexcom-mode = <ATMEL\_FLEXCOM\_MODE\_USART>;

status = "okay";

uart7: serial@200 {

compatible = "atmel,at91sam9260-usart";

reg = <0x200 0x200>;

interrupts = <22 IRQ\_TYPE\_LEVEL\_HIGH 7>;

clocks = <&flx3\_clk>;

clock-names = "usart";

pinctrl-names = "default";

pinctrl-0 = <&pinctrl\_flx3\_default>; // \* Default the FLEXCOM3 is Disabled you have to make "okay" \*//

atmel,fifo-size = <32>;

status = "okay"; /\* Conflict with isc. \*/

};

spi2: spi@400 {

compatible = "atmel,at91rm9200-spi";

reg = <0x400 0x200>;

interrupts = <22 IRQ\_TYPE\_LEVEL\_HIGH 7>;

clocks = <&flx3\_clk>;

clock-names = "spi\_clk";

pinctrl-names = "default";

pinctrl-0 = <&pinctrl\_flx3\_default>;

atmel,fifo-size = <16>;

status = "disabled"; /\* Conflict with isc. \*/

};

};

Step 3: Modify the pin control pins for the specfic is connected you have to refer Schematic

pinctrl\_flx3\_default: flx3\_default {

pinmux = <PIN\_PC20\_\_FLEXCOM3\_IO0>,

<PIN\_PA13\_\_FLEXCOM3\_IO1>,

<PIN\_PC18\_\_FLEXCOM3\_IO2>,

<PIN\_PC22\_\_FLEXCOM3\_IO4>;

bias-disable;

};

Enable the toolchain first : ./opt/poky-tiny/2.5.2/environment---------------------

Step 4: then come to the linux-rba5d2x directory

make mrproper

Step 5: Make distclean

Step 6: Make rb\_a5d2x\_defconfig

Step 7: Make dtbs

Step 8: Make

After the compilation is complited; Copy the zImage and .dtb file to your sd card are NOR flash

zImage you will find in : linux-rba5d2x/arch/arm/boot

.dtb you will find in : linux-rba5d2x/arch/arm/boot/dts

//\* Check after boot the board cd /sys/class /tty/ ttyS5 is present or not

--Then you boot the board the check with loopback programminG--

Connections ; TX of microbus pin to RX pin of Expansion header (PA13)