MROD-X PCB Options

General

There are two major options for assembly of the MROD-X board.
- Build a 6 or 8 channel MROD-X
- Build an MROD-X with 1 or 2 output SHARCs

Both choices can be made independently.

6 or 8 Channel MROD-X

If a 6 channel MROD-X is made then the components that make up 'MROD-In4' are not mounted on the board. This also means that JTAG chains should be re-arranged. This is done by a signal called 'MROD_In4_Present' which is made high or low by placement of the correct values for R523 and R524 (see table 1).

MROD_In4_Present	R523	R524
True	0 ohm	1 Mohm
False	1 Mohm	0 ohm

Tabel 1: MROD_In4_Present signal

1 or 2 output SHARCs

If an MROD-X is made with one output SHARC then SHARC-B can be left out (IC502). This also means that the JTAG chain should be re-arranged. This is done by a signal called 'SharcB_Present' which is made high or low by placement of the correct values for R525 and R526 (see table 2).

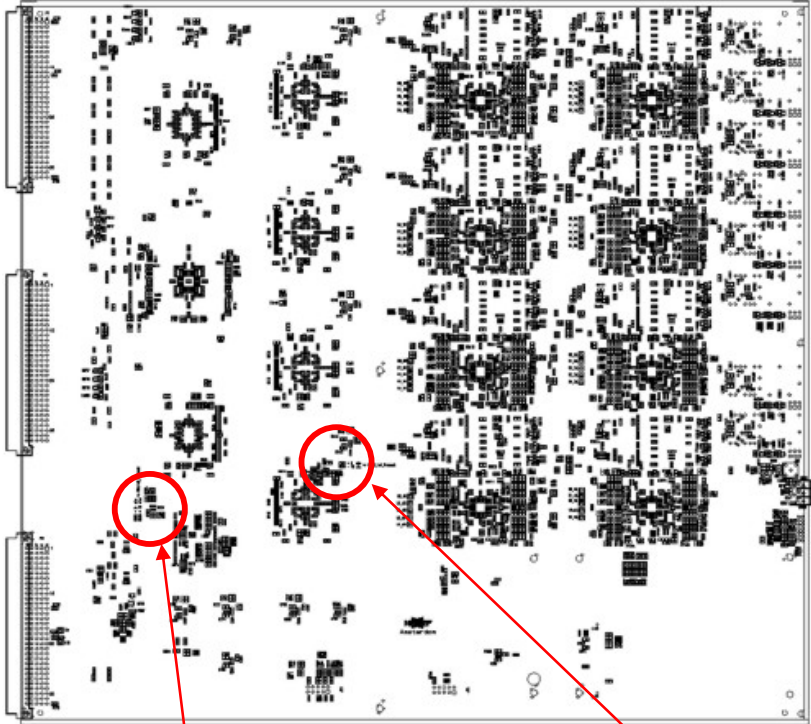| SharcB_Present	R525	R526
True	0 ohm	1 Mohm
False	1 Mohm	0 ohm

Tabel 2: SharcB_Present signal

When only one output SHARC is installed then all bus request signals should be pulled high. Therefore place R541 and R542 should be 4K7 insetad of 1 Mohm (see table 3).

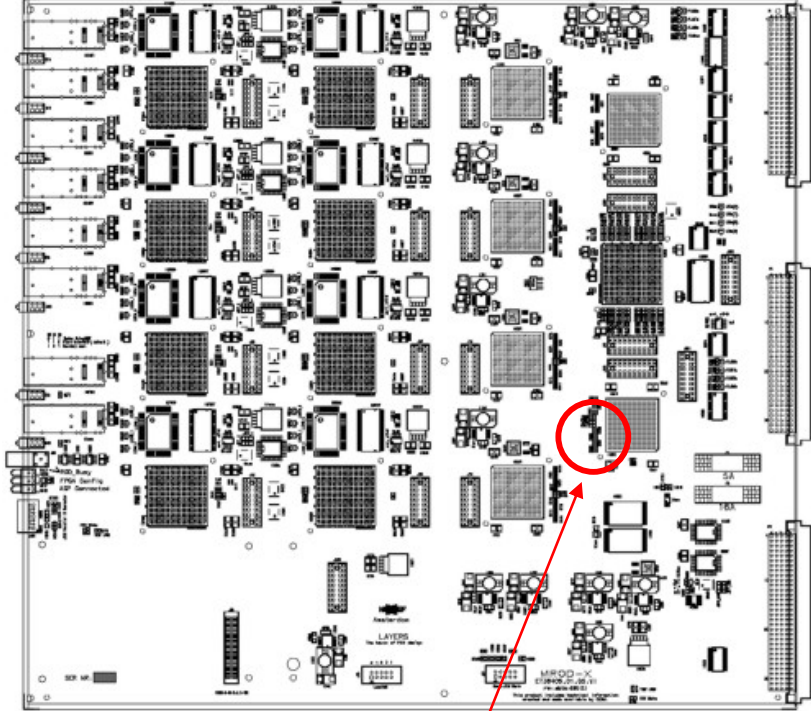| SharcB_Present	R541	R542
True	1 Mohm	1 Mohm
False	4K7	4K7

Tabel 3: Bus Request (BR1_n and BR2_n) signals

Solder side

R523/R524: MROD_In4_Present   R525/R526: ShracB_Preset

Component Side

Bus Request: BR1_n, BR2_n