

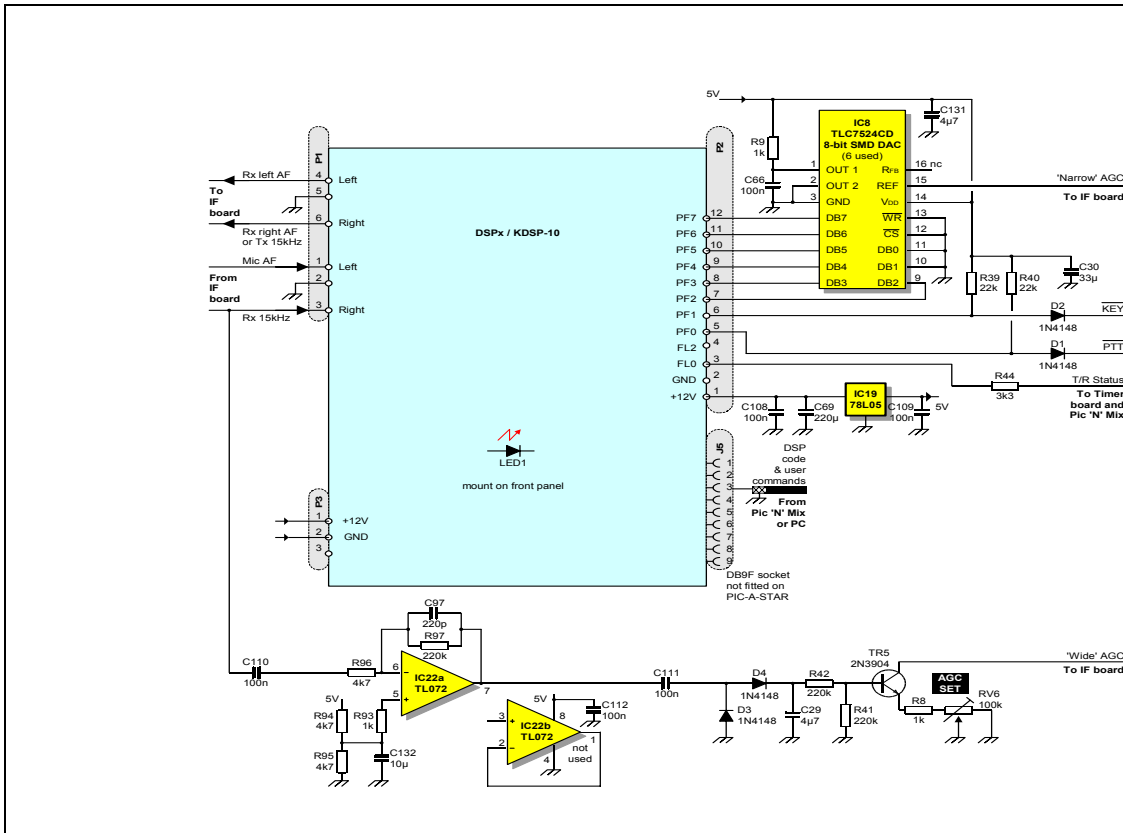
Using the KK7P DSPx module with PicAstar.

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The KK7P DSPx¹ is a pre-built board containing a DSP processor, CODEC and supporting logic. To integrate it into the picAstar you will also need the companion KDSP-10 interface kit which

provides logic level conversion, power regulation and a serial port. Together they replace the Processor and CODEC daughter boards as well as a part of the Motherboard.

The basic interconnections between the KDSP-10 and the rest of STAR are shown below;



KDSP-10 / STAR interconnections: This should be compared with Fig 6 in part 5 of the original STAR articles.

The simplest option, if space is no concern, is to build the STAR motherboard, (omitting IC23, IC21 and associated components), and then make the necessary connections to the KDSP-10 using short wires.

The second option is to build a small PCB to plug directly onto P2 of the KDSP-10 which will hold IC8 plus the components for the KEY, PTT and T/R status lines, and a second PCB to hold the

wide AGC amplifier IC22. (The simplest is to cut off the bottom of the motherboard).

The third option is to obtain the latest version of the KDSP-10 which has provision for IC8 onboard, the diodes for the KEY and PTT lines can be mounted in line with the wiring but you will still need to build a separate board for the wide AGC amplifier IC22.

Using the second method I have been able to mount the

DSPx/KDSP-10 on the back of the IF board to form a DSP “brick” as per Peter’s original design.

When building the KDSP-10, do not install interrupt jumper JP1, in order to avoid a conflict between *INTE* and *PF4*. Also do not fit LED1, but instead connect a length of twin screened cable to allow this LED to be mounted on the front panel.

¹<http://www.kk7p.com/dsp.html>