

“Minerva”

Hardware for DFC

openHPSDR Forum
Friedrichshafen, 25th June 2016

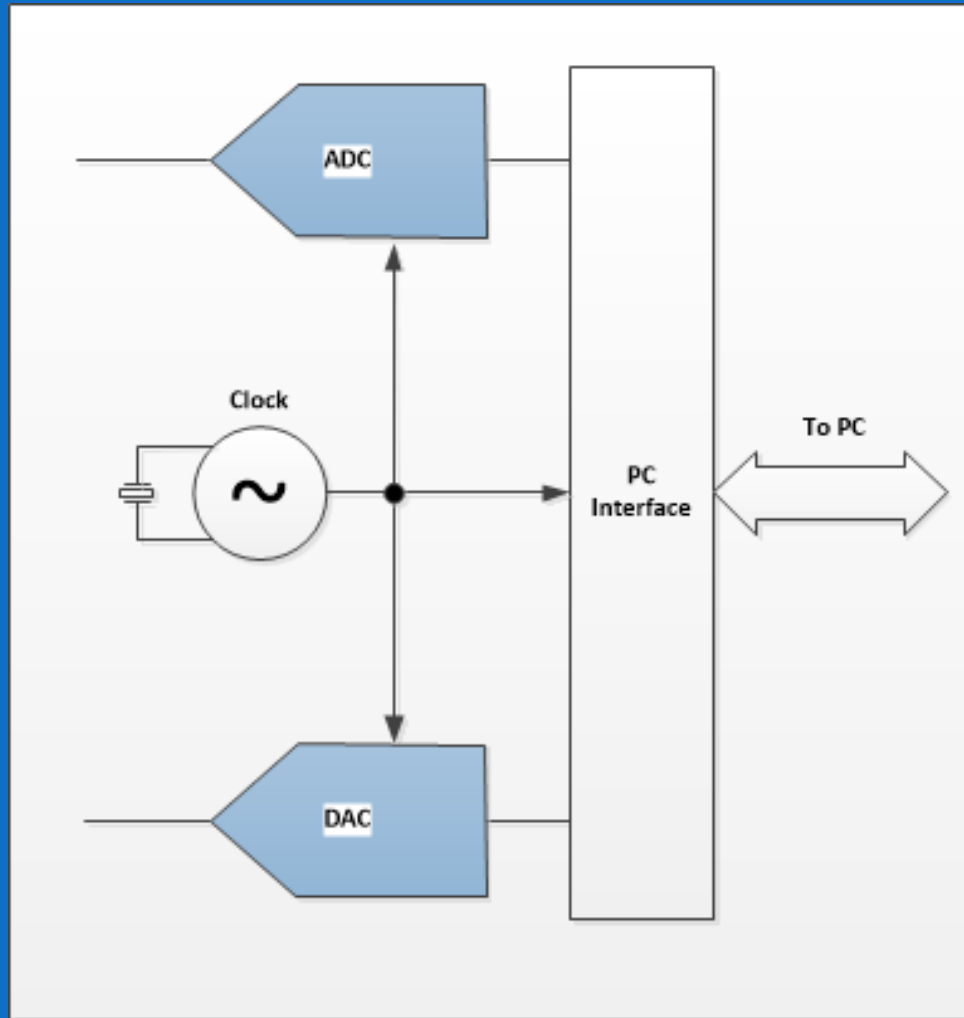
Phil Harman
VK6PH

- DFC is an alternative architecture for SDRs
- It moves all of the DSP to the PC
- Potential to provide high performance at low cost
- It can use Video GPUs and CUDA processing as a cost effective high performance DSP
- “Minerva” is the openHPSDR project name for hardware that supports DFC.
- Flexible architecture to provide simple integration of new devices

DFC

Direct Fourier Conversion

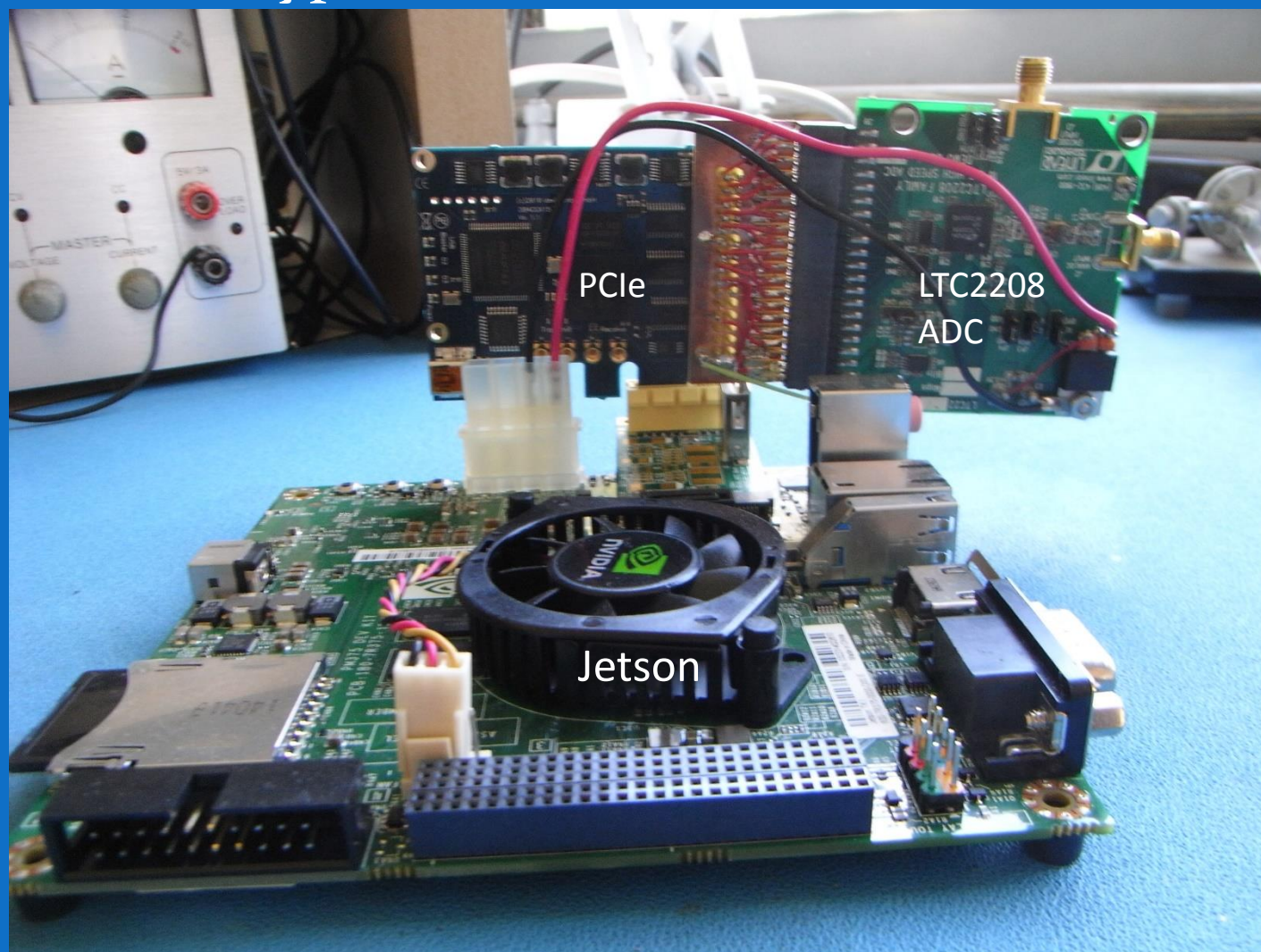
Basic Minerva



Implementation

Direct Fourier Conversion

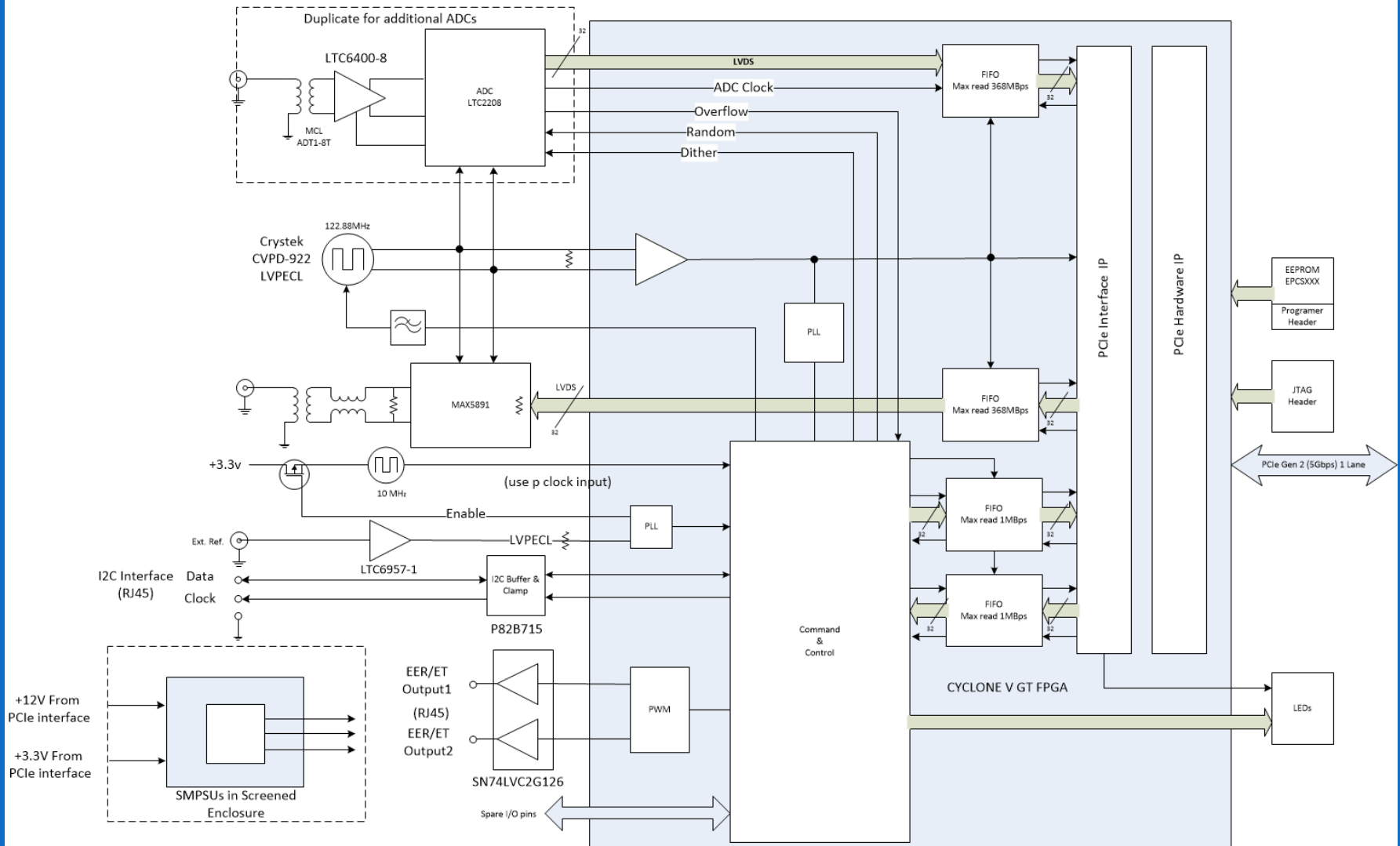
- DFC Prototype



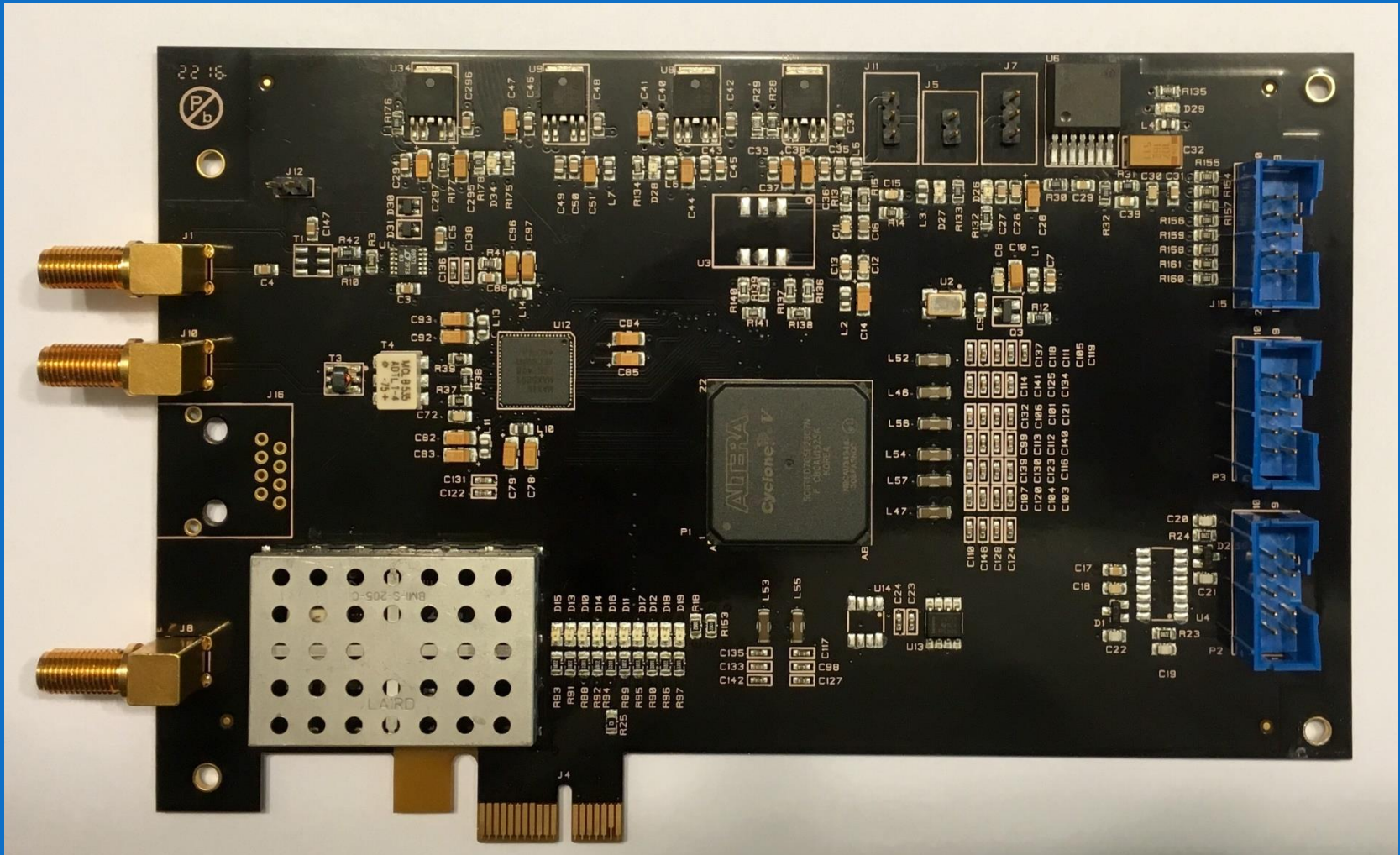
Minerva

Direct Fourier Conversion

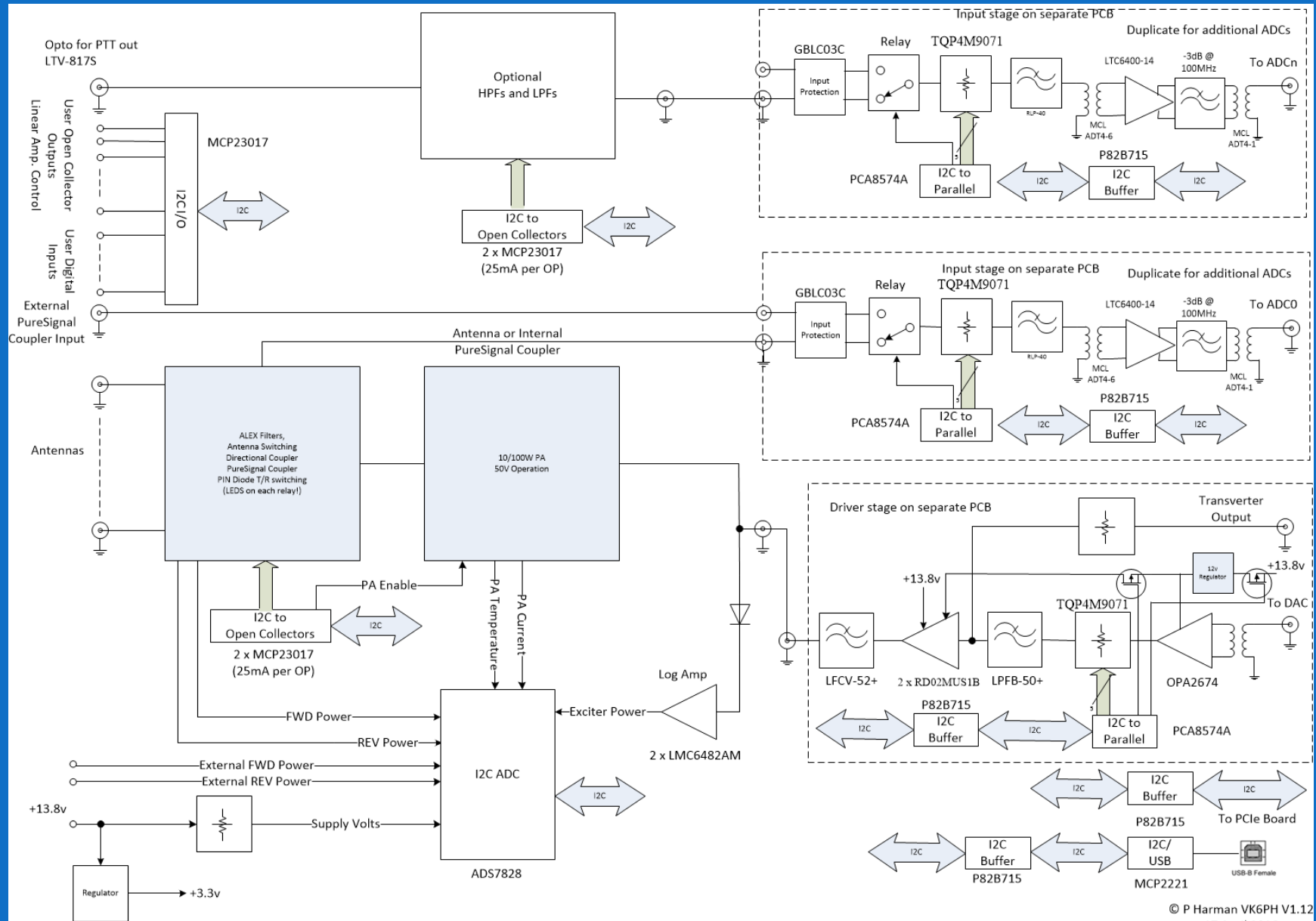
openHPSDR "Minerva"



- Photo of board



Minerva



Questions?