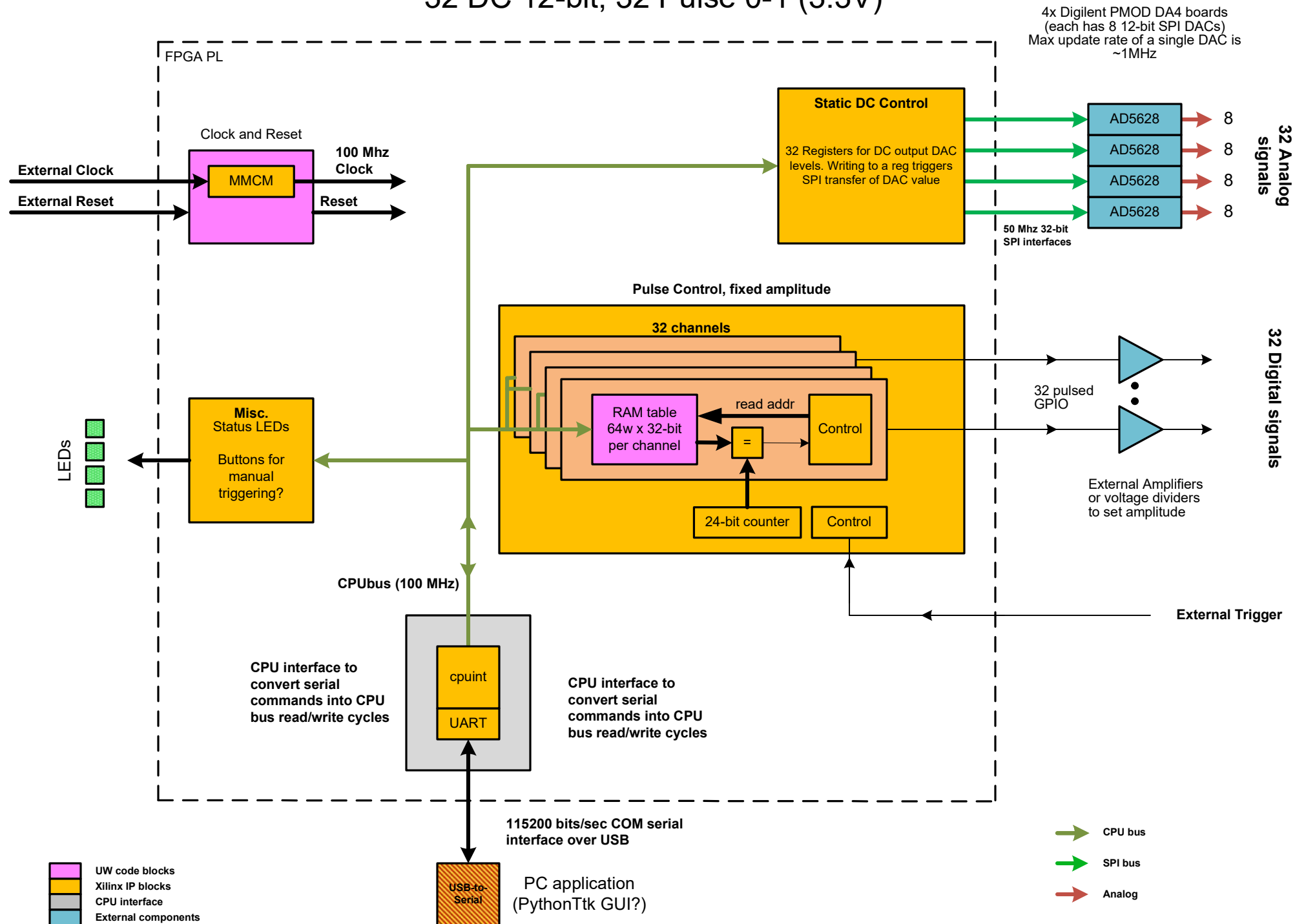


Laser Control FPGA Block Diagram

32 DC 12-bit, 32 Pulse 0-1 (3.3V)



4x Digilent PMOD DA4 boards
(each has 8 12-bit SPI DACs)
Max update rate of a single DAC is
~1MHz

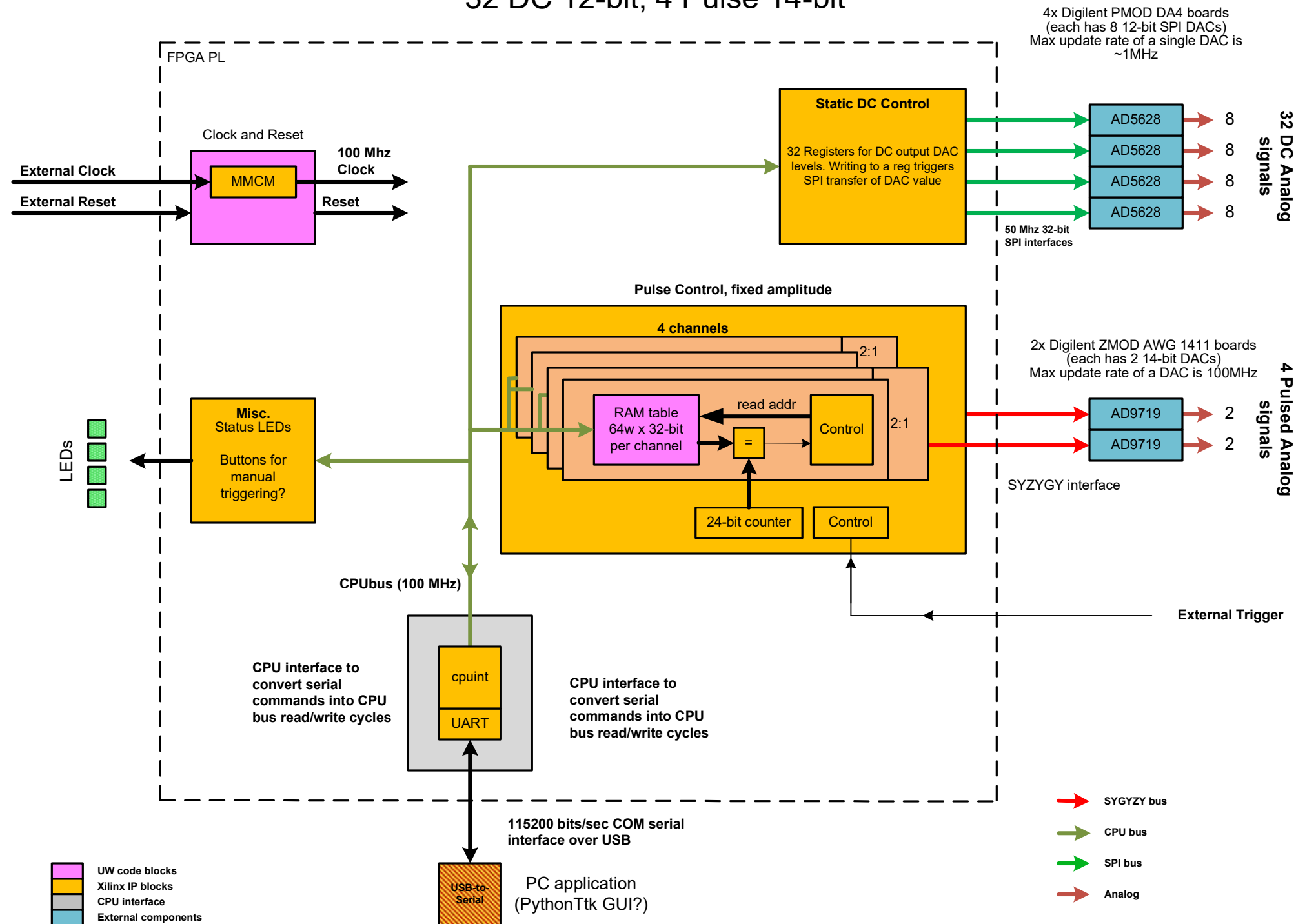
32 Analog
signals

32 Digital signals

Requires board with 4x PMOD connectors
(Zybo) and 32+ GPIO

Laser Control FPGA Block Diagram

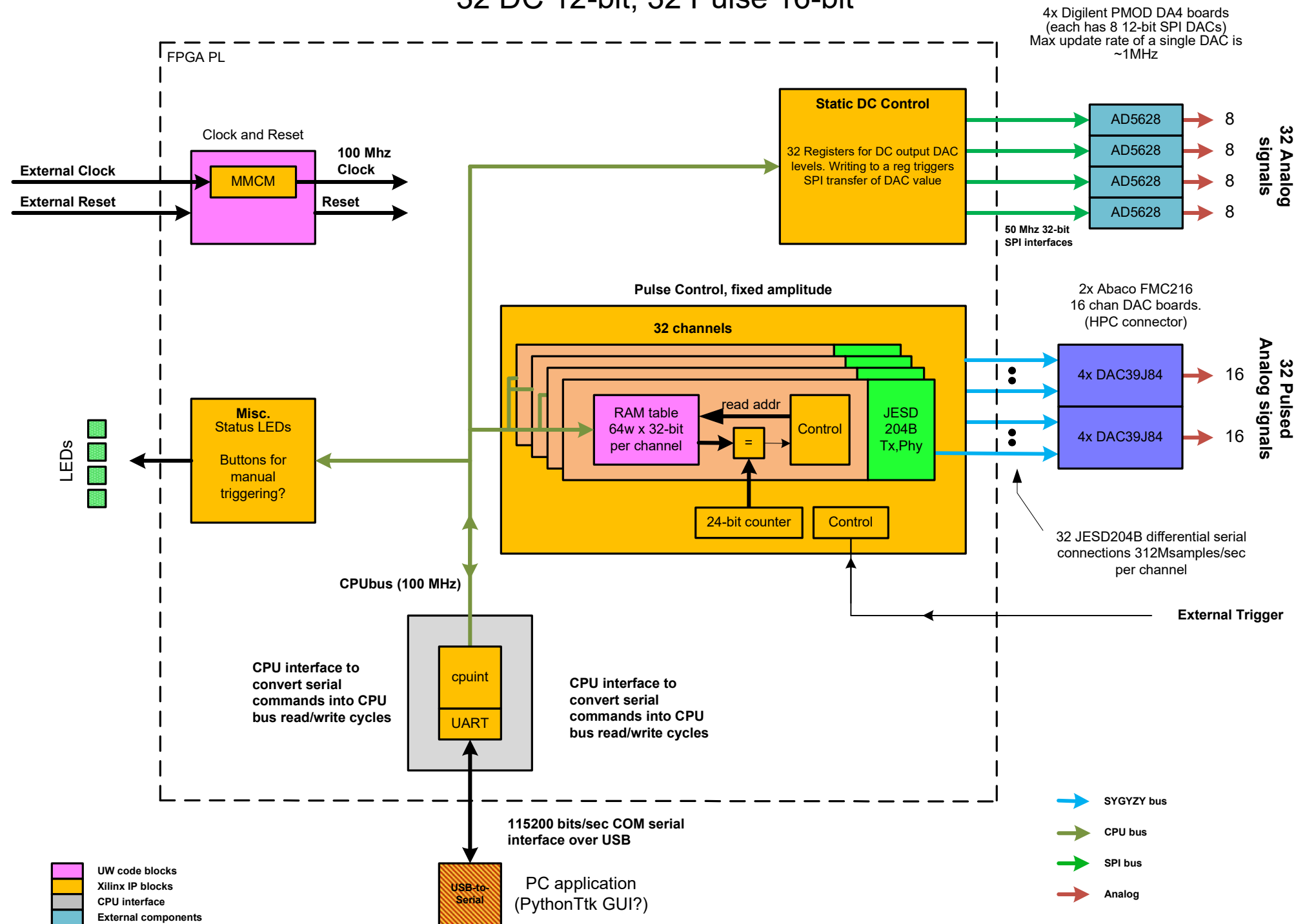
32 DC 12-bit, 4 Pulse 14-bit



Requires board with 2x SYZYGY connectors
(Digilent Eclipse Z7 or PYNQ-ZU) 2 pulsed channels could use Digilent USB104 Artix7

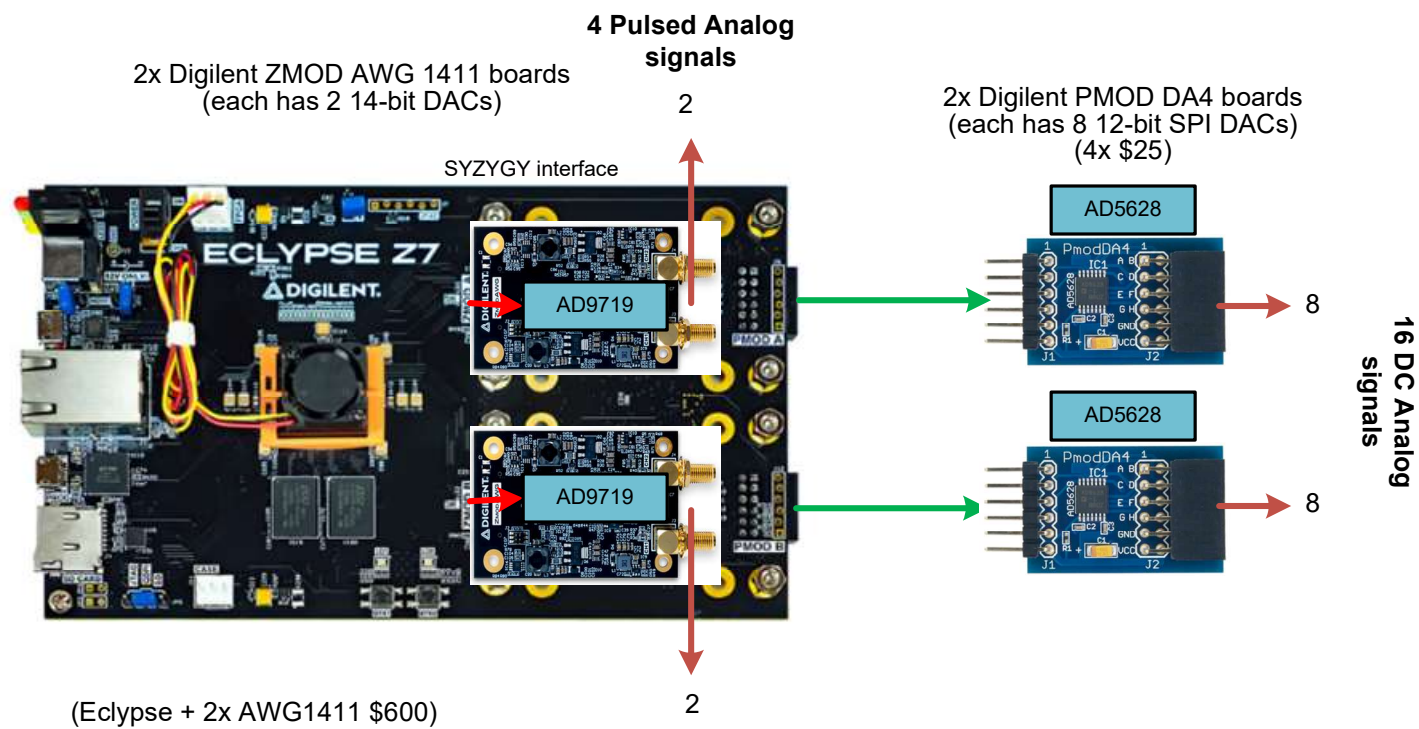
Laser Control FPGA Block Diagram

32 DC 12-bit, 32 Pulse 16-bit

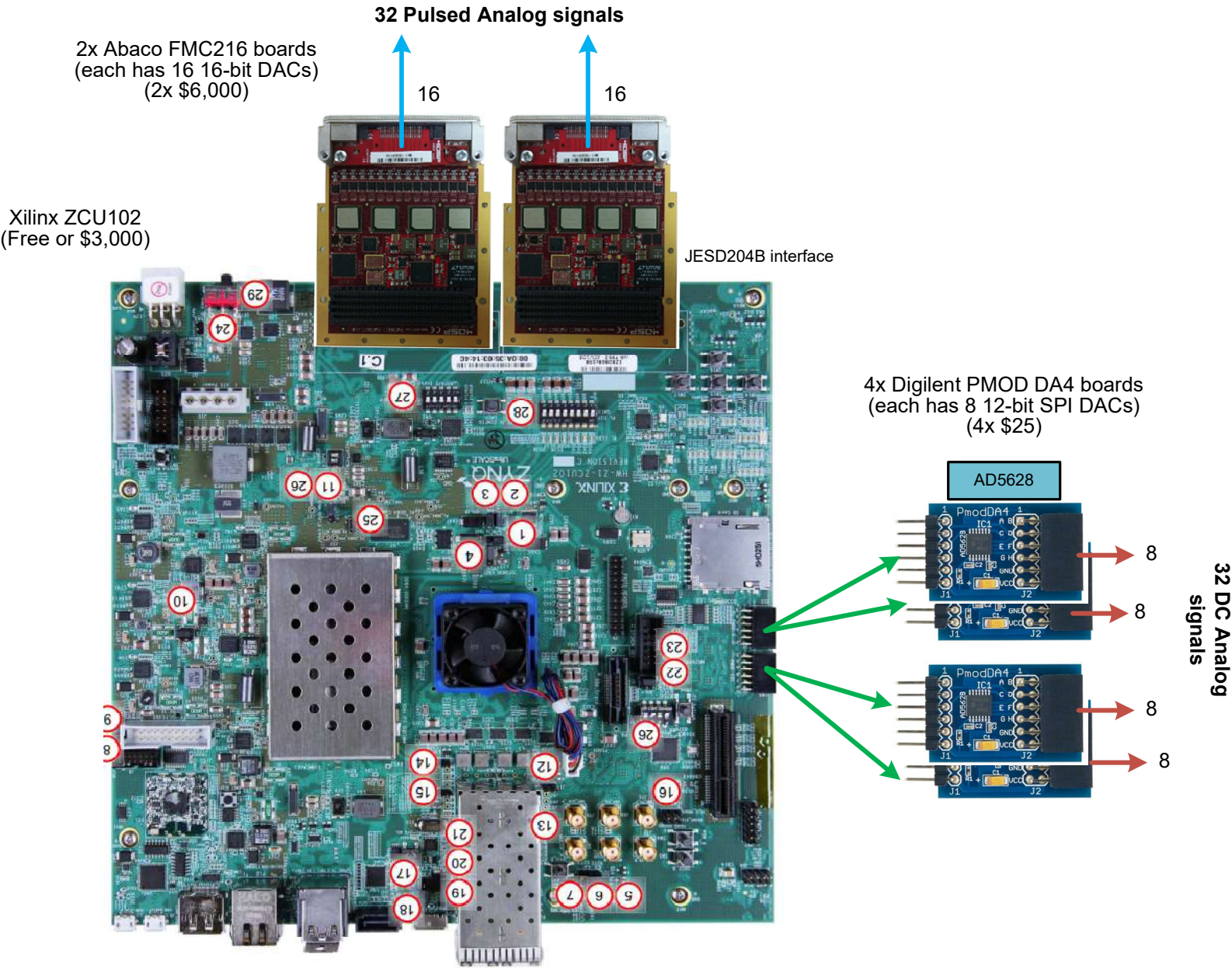


Requires board with 2x FMC HPC connectors (Xilinx VCK190) 16 pulsed channels could use KC705 with 1 FMC HPC

Eclipse Z7 + 2x AWG1411 + 2x PMOD DA4
16 DC 12-bit, 4 Pulse 14-bit analog



Xilinx ZCU102 + 2x Abaco FMC216 + 4x PMOD DA4
32 DC 12-bit, 32 Pulse 16-bit analog



Xilinx KC705 + 1x Abaco FMC216 + 4x PMOD DA4
32 DC 12-bit, 16 Pulse 16-bit analog

