

# RPi3B+ vs FPGA



# Specification

- Arty A7-35T \$99.00  
When I purchased.
- \$129.00 Arty A7-35T  
\$249.00 Arty A7-100T
- Logic Cells  
32,280 101,440
- Block RAM (Kbits)  
1,800 4,860
- Price \$35.00
- 1.4GHz 64-bit quad-core processor
- wireless LAN, Bluetooth 4.2
- micro SD card
- Full-size HDMI

# Specification

- 256MB DDR3L with a 16-bit bus @ 667MHz
- 10/100 Mbps Ethernet
- Verilog or VHDL
- Requires Xilinx software to create bit file.
- 1GB LPDDR2 SDRAM
- 4 USB 2.0 ports
- Gigabit Ethernet over USB 2.0 (maximum throughput 300 Mbps)
- Micro SD port

# Specification

- 4 PMOD I/O
- Arduino™ R3 Headers
- Arty isn't bound to a single set of processing peripherals; one moment it's a communication powerhouse chock-full of UARTs, SPIs, IICs
- CSI camera port for connecting a Raspberry Pi camera
- DSI display port for connecting a Raspberry Pi touchscreen display
- Size 85mm x 45mm  
3.34646in x 1.77165in

# Specification

- Support several SOC ARM, MicroBlaze, and ZipCPU.
- Uart, SPI, IIC, GPIO, and PWM
- Host to end one of kind HX8K Lattice FPGA using 8 bit data port with hand shaking. SOC ZipCPU