

## Comparative Features of EDGE Artix 7 vs Basys 3 FPGA kit

Features	<i>EDGE Artix 7 FPGA Development Board</i>	<i>Basys 3 Artix 7 FPGA Trainer Kit</i>
FPGA	<i>Xilinx Artix 7 XC7A35T-1FTG256C, 33280 Logic Elements, 1843200 bits of Block RAM</i>	<i>Xilinx Artix 7 XC7A35T-1CPG236C , 33280 Logic Elements, 1843200 bits of Block RAM</i>
SDRAM	<i>32MB SDRAM External Memory</i>	---
SPI FLASH	<i>64 Mb FLASH for FPGA Configuration</i>	<i>64 Mb FLASH for FPGA Configuration</i>
Wi-Fi	<i>ESP-12F WIFI Modem</i>	---
Bluetooth	<i>Bluetooth BLE 4.0</i>	---
VGA	<i>12-bit, 4096 Colour</i>	<i>12-bit, 4096 Colour</i>
HDMI	<i>HDMI OUT</i>	---
Sensor1	<i>LM35 Temperature Sensor</i>	---
Sensor2	<i>LDR</i>	---
DAC	<i>12-bit SPI DAC output at J7 Connector</i>	---
Audio	<i>Stereo Jack</i>	---
7 segment Display	<i>4-Digit 7 Segment Display</i>	<i>4-Digit 7 Segment Display</i>
LCD	<i>2×16 Character LCD</i>	---
Buzzer	<i>5v Piezo Buzzer</i>	---
Slide Switch	<i>16 Nos of SPDT</i>	<i>16 Nos of SPDT</i>
LEDs	<i>16 Nos of LEDs</i>	<i>16 Nos of LEDs</i>
Push Button	<i>5 Nos of Push Button</i>	<i>5 Nos of Push Button</i>
MicroSD	<i>Micro SD card Slot</i>	
JTAG	<i>USB JTAG for Programming and Debugging. Fully Compatible with Xilinx Vivado Tool.</i>	<i>USB JTAG for Programming and Debugging. Fully Compatible with Xilinx Vivado Tool.</i>
UART	<i>USB UART can communicate at different baud rate</i>	<i>USB UART can communicate at different baud rate</i>
Clock	<i>50 MHz Single Ended</i>	<i>100 MHz</i>
I/O Connectors	<i>20 I/O Camera connector and 5 I/O TFT connector</i>	<i>3 PMOD Port</i>
XADC	<i>4 channel input XADC connector</i>	<i>XADC Port</i>
USB HID Host	---	<i>USB HID Host for mice, keyboards and memory sticks</i>
Package Includes	<i>EDGE Artix 7 FPGA kit, 2x16 LCD and USB Cable</i>	<i>Basys 3 FPGA kit</i>