





**MKR VIDOR** 4000

With the MKR VIDOR 4000 you can configure it the way you want; you can essentially create your own controller board. It comes loaded with hardware and potential: an 8 MB SDRAM; a 2 MB QSPI Flash chip — 1 MB allocated for user applications; a Micro HDMI connector; an MIPI camera connector; and Wifi & BLE powered by U-BLOX NINA W10 Series. It also includes the classic MKR interface on which all pins are driven both by SAMD21 and FPGA. Plus, it has a Mini PCI Express connector with up to 25 user programmable pins.

The FPGA contains 16K Logic Elements, 504 KB of embedded RAM, and 56 18x18 bit HW multipliers for high-speed DSP. Each pin can toggle at over 150 MHz and can be configured for functions such as UARTs, (Q)SPI, high resolution/high frequency PWM, quadrature encoder, I2C, I2S, Sigma Delta DAC, etc.

#### ARDUINO MICROCONTROLLER

Microcontroller	SAMD21
Architecture	ARM Cortex-M0+ 32bit plus Cyclone 10
Operating Voltage	3.3V
Flash Memory	256 KB
SRAM	32 KB
Clock Speed	48 MHz
DC Current per I/O Pin	3 mA (I/O Pins)

#### GENERAL

Connectivity	Wi-Fi w/ NINA W102
Peripherals	Programmable Cyclone 10 accelerator w/ 8MB RAM
Digital I/O Pins	20 (headers) +32 (mPCI)
Interfaces	I2C, SPI, UART, mPCI express MIPI Camera, miniHDMI
PWM Output	12 (D21)/22 (Cyclone 10)
Analog I/O Pins	7/1
Power Consumption	< 100 mA < 10 mA (Low power, Wi-Fi off)
Weight	9 g
Product Code	ABX00022