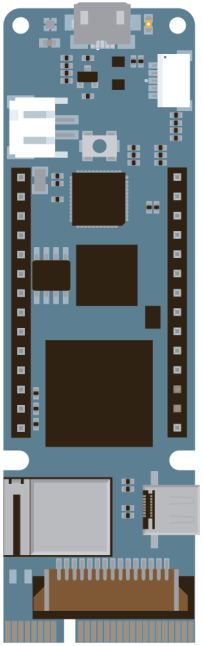

ARDUINO

MKR VIDOR 4000

## Looking for a board for a very specific use that Arduino doesn't make?

Or maybe you want a more complex central board, optimized for your particular needs that will interface with all other Arduino boards and devices. The MKR VIDOR 4000 is highly configurable and powerful, and it perform high-speed digital audio and video processing.

**STORE.ARDUINO.CC/ARDUINO-MKR-VIDOR-4000**

# 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 |