

# VK-RA6M3

## ver. 2.0

ARDUINO UNO rev3 form factor  
Renesas Electronics ARM Cortex-M4 MCU

### R7FA6M3AH3CFC

- 120MHz, 176pins LQFP

### 640 KB OnChip RAM

### 2 MB OnChip FLASH

- 16MB OnBoard QSPI, 64MHz, Quad(Burst), 4-bit
- Execute in place (XIP)

### 2 x USB 2.0

- USB, **HS** Host/Function micro Type **AB** connector
- USB, **FS** Function micro Type **B** connector

### Connector for External Battery (3V)

### Micro SD

- SDHI

### User interface

- 4 LEDs (Red, Green, Blue, Yellow)
- 2 Push buttons

### CMOS camera interface

- KBCR-M04VG-HPB2033VGA 640x480, up to 60fps, horizontal angle 98 degrees, vertical angle 75 degrees

### Communication Ports

- USB, CAN, RJ45, RS485

### LCD display interface

- 40pin 24bit RGB + 6pin I<sup>2</sup>C capacitive touch

### Exp. Ports

- ARDUINO UNO form-factor (rev3)
- 2 Extra header (**10 + 8 I/O** RA6M3 pins)

### Debug ports:

- ARM SWD 2x5 pins, Coresight™
- SEGGER J-Link OB Debugger (GDB) / ARM DAPLink (Composite CDC, MSC, HID)

### DC IN +(5 ... 24)V

- Consumption 500mA max

### Operating temperature:

- -40 ... +85°

### Dimensions:

- 53 mm x 68 mm
- Mounting holes 4 x Ø3,2 mm

