

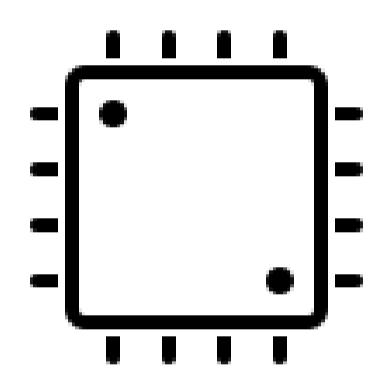
Mecha Comet (I.MX95)

mecha

The Mecha Comet is a handheld modular Linux computer. Using its magnetic snap interface, the Comet can work as a multipurpose device, such as a remote terminal using a keyboard extension, a game controller or a tinkering tool using a breakout extension or you could make your own robot out of it.

The Comet is powered by a 1.8 GHz ARM64 Hexa-core processor, with upto 8GB of memory and 128gb of onboard storage (expandable). The operating system is powered by Mechanix OS, a custom Fedora-based distro for Linux.

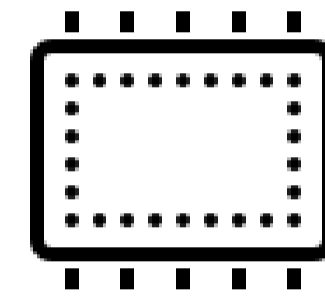
SPECIFICATIONS



System-on-Chip

NXP i.MX 95

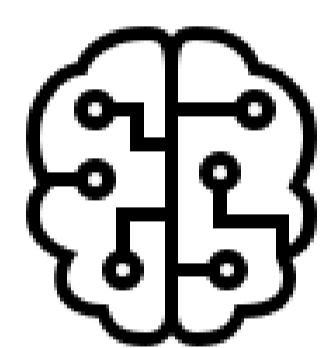
Hexa-Core ARM Cortex-A55, 1.8 GHZ



Memory

4 / 8 GB LPDDR5, 4266 MT/s

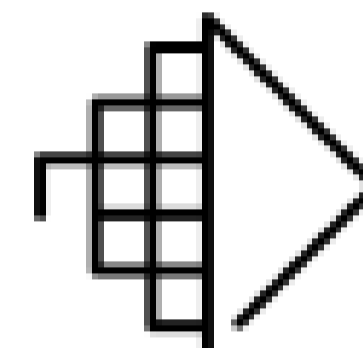
64 / 128 GB eMMC Flash



Processor Units

NXP eIQ Neutron NPU (8 TOPS)

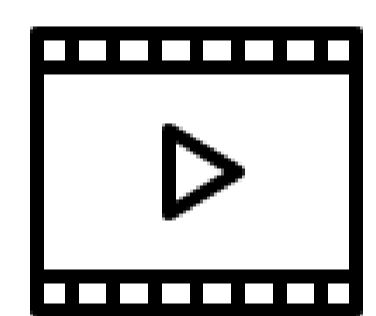
Cortex-M7 @ 800 MHz



GPU

ARM Mali G310 MP2

Up to 1000 MHz shader clock



Video Processing

4k60 H.265, H.264, VP9 decode

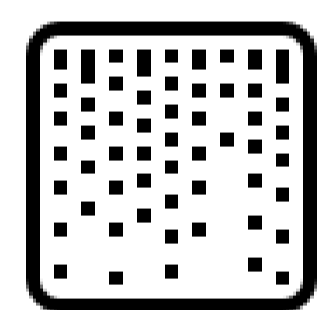
4k60 H.265, H.264 encode*



Wireless

WiFi 6 802.11a/b/g/n/ac/ax

v5.4 Bluetooth, BLE, LE Audio



Display

3.92" AMOLED, 1080x1240

500 nits, 5-finger touch



Display Out

Display Port over Type-C (2k60)

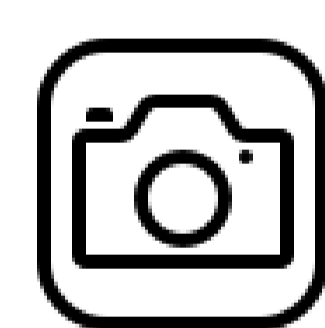
Supports Audio



Audio

1.2 W Speaker, 6 Ohm, 3.5 mm jack

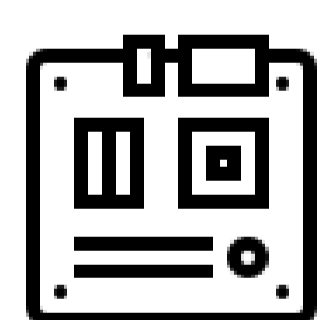
2x HD Digital Mic



Camera

8MP IMX219 sensor, 3264 x 2464@60

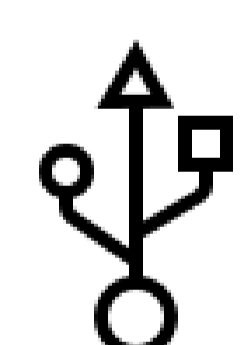
Inbuilt Auto-focus



PCI Express

PCIe 3.0, 1x (8gb/s)

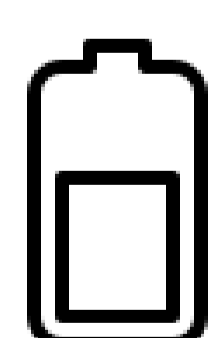
B-Key, 2242 and 3042 sizes



USB

2x USB-C 3.0, 1x USB-C 2.0

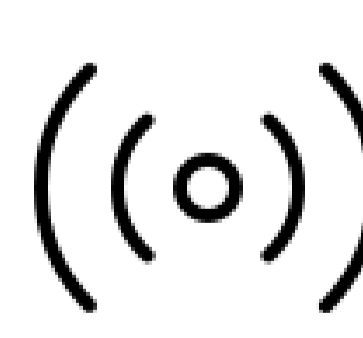
Power Delivery, Up to 24V



Battery

4100 MaH LiPo Battery

Fast Charging, discharge upto 5A



Sensors

Gyroscope, Accelerometer,

Magnetometer, Ambient Light Sensor



Indicators

Inbuilt Haptic Vibration Motor

1x Programmable RGB LED

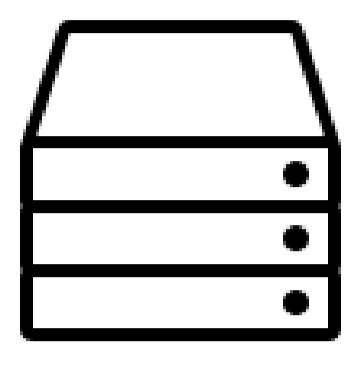


Security

Isolated trust anchor

Supports RSA, ECC, ED25519

Mecha Comet



Expandable Storage
MicroSD (SDXC)
NVMe SSD (2230)

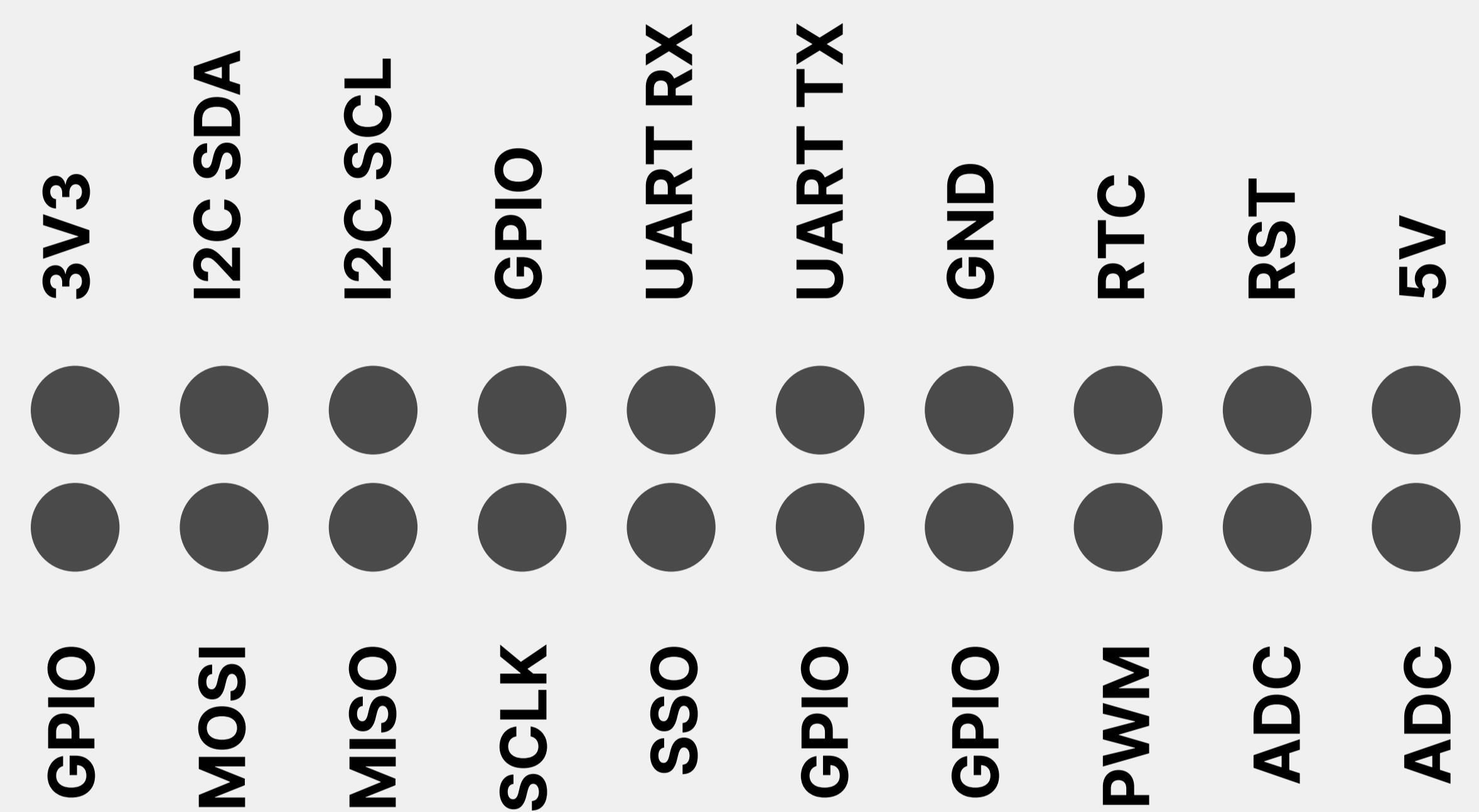
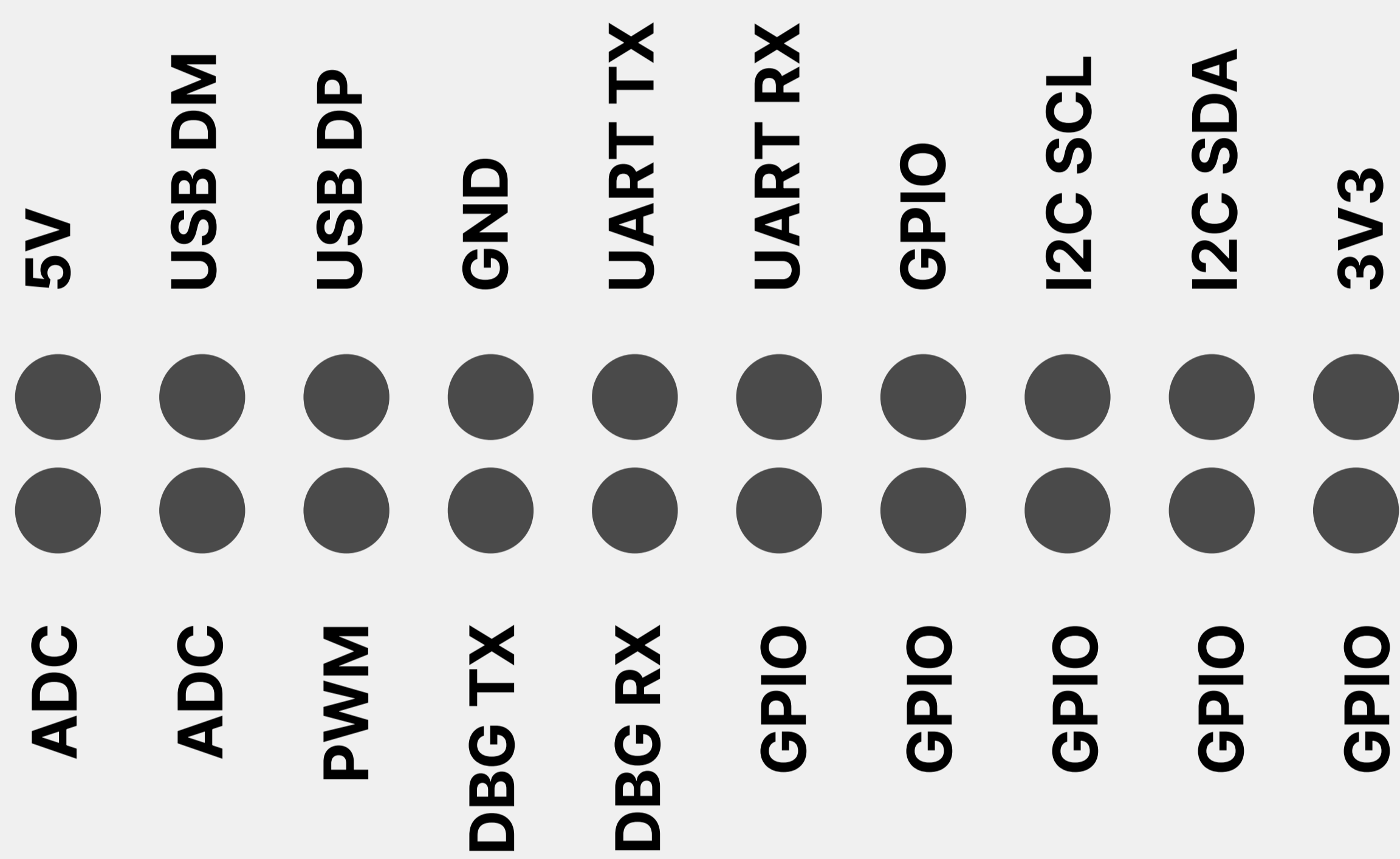


4G Modem
LTE Cat 4 module on M.2
NanoSIM Slot



Dimensions
73 mm x 155 mm x 14 mm
225 grams (7.9 Oz)

40-Pin IO Connector



Physical Layout

