

# H6080

## Pico-ITX Single Board Computer with NXP i.MX8MQ



H6080 is a small form factor Pico-ITX Single Board Computer based on the NXP i.MX8MQ system on chip. It combines high CPU and graphics performance with low power consumption and comes packed with industrial peripheral interfaces.

With its wide input voltage, industrial grade temperature range and low power dissipation it is well suited for vehicle, industrial infotainment and communication systems. H6080 also comes with an M.2 expansion with integrated SIM-slot for mounting an LTE modem. It can also support dual independent displays (LVDS and HDMI).



### FEATURES

- Dual or Quad Core NXP i.MX8M SoC
- 2G/3G GPU and VPU
- Soldered eMMC Flash and LPDDR4 RAM
- USB 3.0, Gigabit Ethernet and CAN 2.0/FD
- LVDS interface
- M.2 Expansion slot with SIM interface
- Industrial temperature range (-40°C to +85°C)
- Pico-ITX form factor

### LOOKING FOR SOMETHING SLIGHTLY DIFFERENT?

In most cases standard products can be customized to specification. With small modifications to hardware and software, you can have the quality and functions you need.

Call us. We will be happy to suggest and implement changes in standard products to meet your requirements exactly.

# H6080 - Technical Specifications

## SOC

NXP i.MX8MQ:  
Quad Core Cortex-A53, 1.3 GHz, 4W TDP, -40°C to +105°C  
Cortex-M4F coprocessor

NXP i.MX8MD (option):  
Dual Core, 1.3 GHz, 4W TDP, -40°C to +105°C

## INTEGRATED GRAPHICS

2G/3G GPU: Vivante CG7000-Lite  
OpenGL® ES 3.1, OpenGL® 3.0, Vulkan®, Open CL™ 1.2

VPU: HD4Kp60/1080p60  
h.265, VP9, h.264, MPEG2, MPEG4p2, h.263, DivX

## MEMORY

LPDDR4 3200: 4GB (option: 1GB, 2GB or 3GB)

## FLASH STORAGE

eMMC: 16 GB (option: 8 GB to 128 GB)

## RTC

Onboard Real Time Clock with soldered rechargeable battery

## ETHERNET

One Gigabit Ethernet interface

## CAN

One CAN 2.0B/CAN FD interface

## SERIAL PORTS

Two RS-232 ports . Option: TTL-levels

One Debug UART (TTL-levels)

One I2C port (configurable as GPIO)

One SPI port (configurable as GPIO)

## USB:

One USB 3.0 Host interface

## GPIO

4 GPIO

## DISPLAY INTERFACES

One HDMI 2.0a

One single channel LVDS

Backlight PWM

## M.2 EXPANSION

One M.2 Key B size 3042

PCIe 2.0 1 lane

USB 3.0

Micro SIM slot

## POWER

9-36V

Option: Automotive load-dump protection

Power consumption: TBD

## FORM FACTOR

Pico-ITX 100mm x 72mm

## TEMPERATURE

Operating: -40°C to +85°C

Storage: -40°C to +85°C

## COOLING

Option: standard heat sink

## SOFTWARE SUPPORT

Yocto 3.0 (Zeus)

Linux 5.4.3 (Real-Time Linux available on request)

