

## Product Brief

**mobiveil**  
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**i.MX6 MPB**

Highly Configurable

Technology Independent

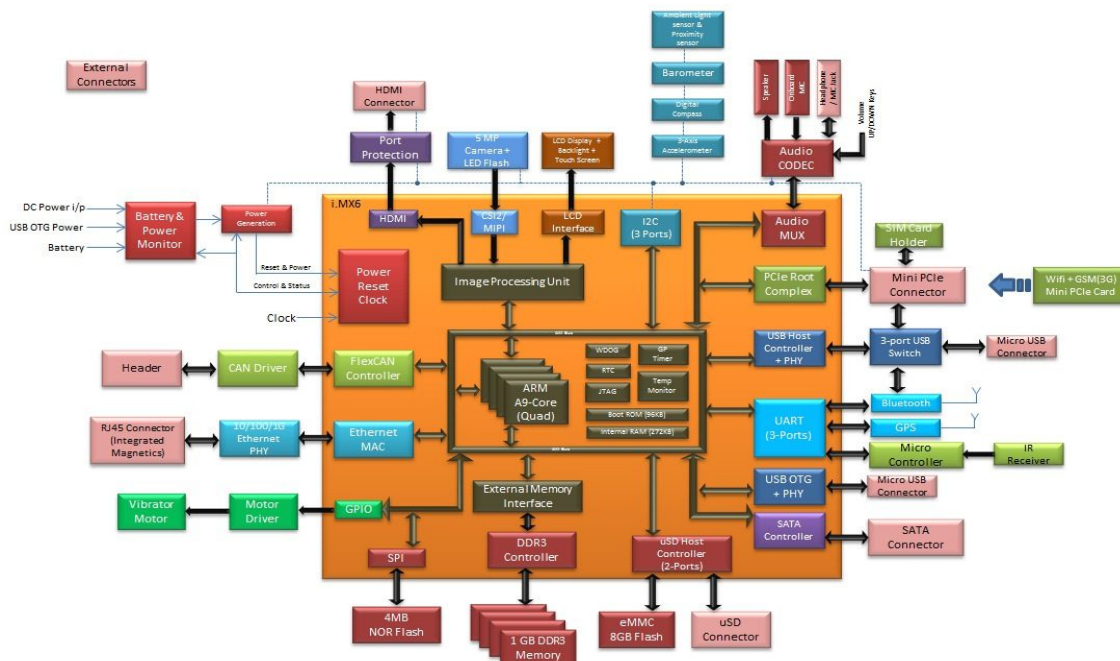
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# i.MX6 MPB Reference Design

## Overview

The i.MX6 MPB (Multi-Purpose Board) Reference Design comprises hardware and software components that provide an integrated platform for building end user devices such as Tablet, PDA, Set-Top Box, and Auto Infotainment.

At the core of the i.MX6 MPB is the Freescale i.MX6 System-on-chip (SoC) device, which provides high-performance multimedia processing and integrated power management for end user devices. The i.MX6 MPB is designed with HDMI media interfaces, networking interfaces (Ethernet, WiFi, Bluetooth), and system interfaces such as USB, micro USB, eSata, MicroSD, InfraRed-Receiver targeting multiple applications from In Vehicle Infotainment, Consumer Gadget like Tablet, STB, OTT Gateway. The platform supports both Android and Tizen variant and can be customized for applications specific to



# Specifications

## Support for Dual/Quad i.MX6 processor

### Memory

- 1GB on board DDR3 memory
- 8GB internal NAND storage
- Extended for SATA Gen 2.0 storage
- uSD connector support up to 32GB storage
- 4MB internal NOR Boot Flash

### Interfaces

- Gigabit Ethernet RJ45 port
- Wi-Fi 802.11 a/g/b/n, BT2.0 with EDR
- 3G LTE with SIM support
- 1x USB 2.0 Host with micro-USB
- 1x USB OTG with micro-USB
- GPS with 80 dynamic channels
- IR Receiver unit
- HDMI 1.4 port
- JTAG, UART Debug port

### Media

- 7" RGB TFT LCD display screen with backlight
- Projected Capacitive Touch panel (Multi-touch)
- 5MP Autofocus camera with LED flash
- Ultra low-power stereo Audio Codec
- 3.5mm Audio Jack with on-board mic
- Class-D Speaker output

### Sensors

- Vibration Motor with driver
- Ambient Light Sensor, 3-AXIS Accelerometer,
- Digital-e-Compass, Proximity Sensor, Barometer

### Power Consumption

- Total power consumption 17W

### Operating Temperature

- -40 to 85 0C

### Mechanical Dimension

- Dimension: 4.5 inch x 5.5 inch

### Memory

- Android, Linux
- OpenBricks, GeexBox: STB Application
- XBMC

## Features

- i.MX6 Processor @ 1GHz
- Onboard DDR3 – 1GB
- 8GB NAND Flash
- uSD and SATA support
- 3G/LTE Modem
- 1G Ethernet ports
- WiFi Support
- GPS/IR
- 7" TFT with Multi Touch
- Sensors targeting IoT applications

### Ordering Part

**MV-i.MX6-2-1G-HDMI** – Dual Core i.MX6 with 1G DDR3, No LCD

**MV-i.MX6-2-1G-LCD** – Dual Core i.MX6 with 1G DDR3, With 7" LCD

**MV-i.MX6-4-1G-HDMI** – Quad Core i.MX6 with 1G DDR3, No LCD

### Target Applications

- Tablet
- PDA
- Set-top-Box
- In Vehicle Infotainment
- Over the Top (OTT)
- Internet of Things (IoT) Gateway

### Deliverables

- Schematics (PDF)
- User Manuals
- Availability: Q2, 2014

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