1 FEATURES

- **i.MX6 S/DL/D/Q Microprocessors**
- **4GB to 8GB eMMC**
- **512MB to 2GB DDR3**
- **204-pin SODIMM footprint**
- Resistive Touch Interface
- 3x I^{2}C
- 4x UART
- 2x SDIO
- 1x USB OTG
- 1x USB Host
- 1x RGB-24
- 1x 4-lanes LVDS (24-bits)
- 2x PWM
- 2x SPI
- 1x 8-bit Parallel CSI
- 1x 4-lanes MIPI CSI-2
- 2x CAN
- 3x Audio Interfaces (I^{2}S, PCM, SPDIF)
- 1x SATA-II
- 1x PCI-e
- 30x General Purpose I/Os
- Linux and Android compatible
- Hardware Accelerated Graphics
- Image and Video Processing Units

2 APPLICATIONS

- Automotive Infotainment
- Tablets
- Video Surveillance
- Kiosks
- Digital TV
- Instrumentation and Data Visualization
- Telematics
- Human-Machine Interfaces
- Digital Video Recorders

3 DESCRIPTION

The TC-IMX6x series of system on modules from Turing Computer delivers high computation performance while providing several interfaces for external peripherals, such as Inter-Integrated Circuit (I^{2}C), Serial-Peripheral Interface (SPI), Universal Serial Bus (USB) interfaces, UARTs, CAN bus and several General Purpose I/Os.

Multimedia and high performance graphics applications are supported by two display interfaces (RGB-24 and LVDS) and the graphics processing power of the NXP's i.MX6x microprocessor, which includes integrated OpenGL-compatible 2D and 3D graphics acceleration, video and image hardware processing units for compression and decompression of recorded videos and images taken from its CSI and/or MIPI interfaces.

There are also two SDIO buses available for mass storage cards or to connect several Wifi and Bluetooth modules. One SATA-II and one PCI-e buses give the flexibility needed for several external devices, from Solid State Drives to expansion modules.

The TC-IMX6x modules are supplied in twelve different versions, which share the same 204-pins SODIMM package, ranging from single-core to quad-core microprocessors and different DDR3 and eMMC configurations. Also, they are backwards compatible with our i.MX53 modules.

4 BLOCK DIAGRAM