# RB-GT4
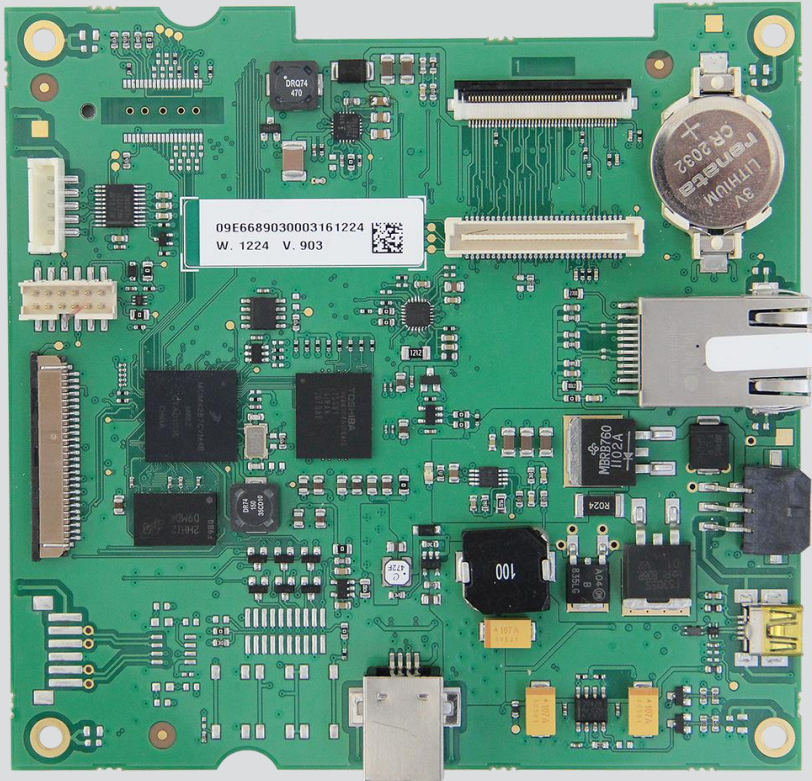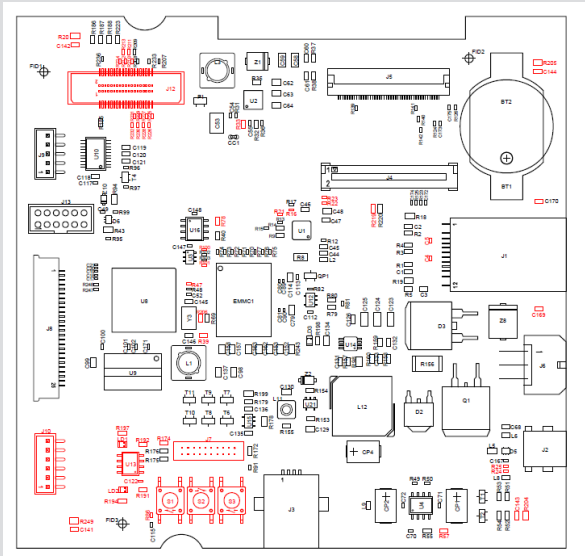
## iMX 287 Board

The industrial designed *R*eference *B*oard *GT4* (Graphic Terminal 4th generation) compact single board integrates a Freescale 454MHz ARM926EJ-S core low-power multimedia application processor with LINUX support ready. The Roj development kit includes all the necessary HW boards, fixtures and LCD related cables, but also includes the Roj-customized API, utility & source codes, including QT ™ basic project (time/date setup, touch calibration, application SW update via USB host). The complete host Linux environment "ready to use" is available through a virtual machine disk image for Oracle ™ VM VirtualBox.

# SPECIFICATIONS

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|---|---|
| **Processor** | Freescale i.MX287 @ 454MHz |
| **Dimensions** | 120x116 mm Open Frame |
| **Memory** | DDR2 200MHz up to 256MB |
| | Nand Flash with embedded controller (eMMC) 4GB on board |
| **Video** | WVGA 800 x 480 18 bpp for Tianma diplay TM070RRNZ04, 7'' |
| | up to 262K colours 9" available via display expansion board |
| **Backlight** | Led string driver 33VMax @ 20mA |
| **Exp.board** | Expansion connector is available for different display WVGA 24 bpp |
| **Touch Screen** | Resistive 4 wire integrated |
| **Comunication** | Ethernet port 10/100Mbit RJ45connector with LED |
| | CAN 1 port |
| | RS232 1 port |
| | USB 1 Host port High-speed -1 Device port for software updates |
| | RS485 optional (not mounted) 1 port |
| | GPIO 1 port for bubbles keyboard up to 16 keys |
| **RTC** | PCF8536T Battery on socket (CR2032) |
| **Accessory boards** | RFID card reader RFID MIFARE ™ NXP card reader (via RS232 port) |
| **Power supply** | +24VDC +/ 20%, Max 25W +9 to 30 VDC acceptable |
| **Temperature** | 0 °C ~+ 45 °C operating - 25°C ~ + 85°C storage |
| **SW** | BSP Freescale (L2.6.31_10.08.01_SDK_source_bundle.tar.gz) |
| | OS (target) Linux, Kernel 2.6.35 |
| | OS (host) Linux Ubuntu 10.10 (virtual machine disk image ready to use available) |
| | GUI Library QT ™ 4.8.3 (qt-everywhere-opensource-src-4.8.3.tar.gz) |





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