

KARO TX Computer on Module
Linux and Windows Embedded
Board Support Package
Features

For the latest software and documentation refer to:

www.karo-electronics.com/download.html

1 Windows Embedded driver list

Driver	TX25	TX27	TX28	TX48	TX51	TX53	TX6
Windows Embedded CE Version	CE6 R3	CE6 R3	CE6/EC7	EC7	CE6 R3	EC7	EC7/EC2013
Kernel debugger (Ethernet KITL)	◆	◆	◆/◆	◆	◆	◆	◆
Ethernet	◆	◆	◆/◆	◆	◆	◆	◆
LCD display	◆	◆	◆/◆	◆	◆	◆	◆
Backlight	◆	◆	◆/◆	◆	◆	◆	◆
USB OTG	◆	◆	◆/◆	◆	◆	◆	◆
USB Host	◆	◆	◆/◆	◆	◆	◆	◆
NAND Flash (Persistent Storage)	◆	◆	◆/◆	◆	◆	◆	◆
RTC	◆ ¹⁾	◆	◆/◆	◆	◆	◆	◆
SPI	◆	◆	◆/◆	◆	◆	◆	◆
I2C	◆	◆	◆/◆	◆	◆	◆	◆
General Purpose IO	◆	◆	◆/◆	◆	◆	◆	◆
SD Host Controller	◆	◆	◆/◆	◆	◆	◆	◆
UART	◆	◆	◆/◆	◆	◆	◆	◆
General Purpose Timer	◆	◆	-	-	◆	-	-
SGTL5000 Audio	◆	◆	◆/◆	◆	◆	◆	◆
TSC2007 Touchscreen Controller	◆	◆	◆/◆	-	◆	◆	◆
Keypad	◆	◆	◆/◆	◆	◆	◆	◆
Watchdog	◆	◆	◆/◆	◆	◆	◆	◆
Internal Touchscreen Controller	◆	N/A	◆/◆	◆	N/A	N/A	N/A
Internal ADC	◆	N/A	◆/—	-	N/A	N/A	N/A
CAN	◆	N/A	◆/◆	-	N/A	◆	◆
Freescale Multimedia SDK/TI PowerVR	N/A	◆	◆/—	◆	◆	◆	◆
PolyTouch™ - Projektive-Capacitive Touch	◆ ²⁾	-	◆ ³⁾ /◆ ²⁾	◆ ³⁾	-	◆ ³⁾	◆ ³⁾

¹⁾ Support for I²C RTC DS1339 on custom baseboard, the i.MX25 internal RTC is not supported

²⁾ Supports firmware version M06

³⁾ Supports firmware version M06 and M09

Also refer to the links below for a list of catalog items included in particular Windows Embedded CE run-time licenses:

[Windows Embedded CE 6.0 Operating System Components](#)

[Windows Embedded Compact 7 Operating System Components](#)

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<http://www.karo-electronics.com/registration.html>

2 Linux BSP driver list

Driver	TX25	TX27	TX28	TX48	TX51	TX53	TX6
Linux kernel version	2.6.31	2.6.31	3.16	3.16	2.6.31/3.0	3.16	3.16
Ethernet	◆	◆	◆	◆	◆/◆	◆	◆
NAND Flash	◆	◆	◆	◆	◆/◆	◆	◆
USB Host	◆	◆	◆	◆	◆/◆	◆	◆
USB Device	◆	◆	◆	◆	◆/◆	◆	◆
UART	◆	◆	◆	◆	◆/◆	◆	◆
I2C	◆	◆	◆	◆	◆/◆	◆	◆
SPI	◆	◆	◆	◆	◆/◆	◆	◆
PWM	◆	◆	◆	◆	◆/◆	◆	◆
SD Host Controller	◆	◆	◆	◆	◆/◆	◆	◆
LCD	◆	◆	◆	◆	◆/◆	◆	◆
VPU	N/A	◆	N/A	N/A	◆/-	-	◆
Watchdog	◆	◆	◆	◆	◆/◆	◆	◆
RTC	◆ ¹⁾	◆	◆	◆	◆/◆	◆	◆
Keypad interface	◆	◆	◆	◆	◆/-	◆	◆
Suspend/Wakeup	-	◆	-	-	◆/-	◆	◆
General Purpose IO	◆	◆	◆	◆	◆/◆	◆	◆
SGTL5000 Audio	◆	◆	◆	◆	◆/-	◆	◆
TSC2007 Touchscreen Controller	-	◆	◆	◆	◆/◆	◆	◆
Internal Touchscreen Controller	◆	N/A	◆	◆	N/A	N/A	N/A
CAN	◆	N/A	◆	◆	N/A	◆	◆
PolyTouch™ - Projektive-Capacitive Touch	-	-	◆	◆	-	◆	◆
Dynamic Voltage Frequency Scaling (DVFS)	-	-	-	-	-	-	◆

¹⁾ Support for I²C RTC DS1339 on custom baseboard, the i.MX25 internal RTC is not supported

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3 Document revision history

Revision	Changes
2010-01-27	Initial release
2010-01-28	+ Freescale Multimedia SDK
2010-04-30	Update / Starterkit 5 v3 support schedule
2010-05-31	New: SGTL5000 audio support for TX25 and TX51 VPU support Changed: SGTL5000 and TSC2007 for TX27 on request
2010-06-09	New in Windows CE: Watchdog and TX27 keypad support
2010-08-20	WinCE & Linux SGTL5000 audio and TSC2007 touch support for TX27, TX27 Linux Kernel 2.6.31 Linux keypad driver for all TX modules, TX51 USB device support and suspend/wakeup
2010-09-21	i.MX25 internal RTC is not supported on TX25, RTC driver for external DS1339 announced.
2010-10-28	TX28 added
2011-02-09	TX28 Windows CE list updated, Linux release features announced
2011-03-18	TX28 Linux driver list updated.
2011-05-10	TX28 Linux NAND support added, USB support delayed to 05/11.
2011-06-01	TX28 Linux USB Host support added, USB Device tbd.
2011-06-17	TX53 added
2011-08-22	TX53 updated (Linux USB Device, PWM), TX51 Linux kernel version 3.0 added
2011-08-23	TX53 Windows CE CAN support added
2011-09-08	TX51 Windows CE GPIO support added
2011-10-26	Windows Embedded PolyTouch™ driver support added, TX53 Windows Embedded driver list updated
2011-12-20	TX28 Linux driver list updated, TX25 PolyTouch™ driver support added
2012-01-26	TX53 Windows CE PWM/SPI/Watchdog support added
2012-03-30	TX28 updated Linux & WinCE
2012-04-30	TX53 Linux drivers added: Keypad/Suspend/audio/CAN
2012-06-26	TX28 Windows Embedded Compact 7 support added / TX53 Linux update
2012-08-31	TX48 Linux support added
2012-10-19	TX48 Windows support added
2013-04-23	TX6 added
2013-07-01	TX48 and TX6 Linux updated
2013-08-02	TX48 Windows and TX28 Linux updated
2013-11-08	TX6 Linux kernel version 3.12 added, Linux DVFS driver support added
2013-11-13	TX53 Linux kernel version 3.12
2014-06-16	TX6 Linux kernel version 3.15, TX48 WinEC7 PowerV
2014-07-18	TX6, TX48 driver lists updated, Polytouch firmware note added
2014-08-14	TX48 Windows and TX53 Linux updated
2014-09-11	TX28 Linux kernel version 3.16, UCB1400 removed
2015-01-26	TX6 WinEC 2013 and SPI support added

- ◆ Supported
- Not included
- N/A Not applicable
- Q1/10 Scheduled release date