

# Versions History

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# Chronological

Date	Driver/Tac	Version	Description / Changes
27. 11. 2006	SER_1B	1.02o	CTS disable possible
15. 03. 2007	TAC / TA2	1.15l	Some new features
15. 03. 2007	CAN	1.00j	15 Mailboxes / Bug fixes
20. 03. 2007	SER_XUART	1.00f	Tiger-2 bug fixed
21. 03. 2007	TAC / TA2	1.15m	XIN\$
21. 03. 2007	PLSOUT1	1.00l	Set rest pulses / SOFT STOP / documentation
26. 03. 2007	LCD-S1D13700	1.00h	String error bug is solved
24. 04. 2007	TOUCHPANEL	1.00i	Beep / Contact Flag / X-Port
27. 04. 2007	CAN	1.00k	Buffer
27. 04. 2007	TOUCHPANEL	1.00j	Alternative Sek-4 Key buffer
15. 05. 2007	TOUCHPANEL	1.00k	Attribute bug fixed
15. 05. 2007	TAC / TA2	1.15n	UPDATE_ME bug fixed
24. 05. 2007	SER1B	1.02p	TE bug fixed
24. 05. 2007	SER1B	1.03a	Change RTS pin
24. 05. 2007	PLSI2	1.00k	Compiles without errors
31. 05. 2007	TAC / TA2	1.15o	Graphic Rotate SRC in FLASH available
01. 06. 2007	SER1B	1.03b	Buffer handling R02 & R05
01. 06. 2007	PLSOUT1	1.00m	UFCO_OPL_SET_LEV
05. 06. 2007	LCD-SED1520	1.00b	First release
08. 06. 2007	TAC / TA2	1.15p	XPort16 & XPort24
14. 06. 2007	RTC1	1.01b	Set day or month to 0 is corrected
14. 06. 2007	SER1B	1.03b	UFCO_OBU_ERASE works correct again
22. 06. 2007	PLSIN1	1.00m	L37 as input pin is possible
02. 07. 2007	LCD1	1.01p	Port-7 as LCD Bus available
02. 07. 2007	TAC / TA2	1.06a	UPDATE_ME speedsub/ speedtask
04. 07. 2007	Analog3	1.00j	First release for Tiger-2

## Chronological

04. 07. 2007	SER1B	1.03e	41.600 & 100.000 Baud
05. 07. 2007	RTC1	1.01c	English language & correct time set @ last day of month
02. 08. 2007	TOUCHPANEL	1.00l	Pressed length detection
09. 08. 2007	TOUCHPANEL	1.00m	For the use with Analog2.tdd
09. 08. 2007	ANALOG2	1.01d	For the use with Touchpanel.tdd
09. 08. 2007	TAC / TA2	1.16b	I2C Delay maximum increased
13. 08. 2007	TAC / TA2	1.16c	New I2CL_SETUP with 6. parameter for separate delay at clock-bit 9 (ACK)
21. 08. 2007	TAC / TA2	1.16d	SIGNAL_AVERAGE
10. 09. 2007	TAC / TA2	1.16f	CALIBRATE_LONG / SET_DOT
20.09. 2007	TAC / TA2	1.16g	SCAN_OR_SKIP
24.09. 2007	Pwmin	1.00g	Interference
01.10. 2007	TAC / TA2	1.16h	UNINSTALL_DEVICE
01.10. 2007	SER2	1.00k	UNINSTALL_DEVICE
02.10.2007	ANALOG2	1.01e	UNINSTALL_DEVICE
02.10.2007	PWM2	1.01f	UNINSTALL_DEVICE
02.10.2007	FREQ1	1.00m	UNINSTALL_DEVICE
02.10.2007	CNT1	1.00n	UNINSTALL_DEVICE
02.10.2007	ENC1	1.00l	UNINSTALL_DEVICE
02.10.2007	PLSO2	1.01g	UNINSTALL_DEVICE
04.10.2007	SET1	1.00e	UNINSTALL_DEVICE
04.10.2007	RES1	1.00e	UNINSTALL_DEVICE
04.10.2007	XOR1	1.00e	UNINSTALL_DEVICE
04.10.2007	TMEM	1.00h	UNINSTALL_DEVICE
04.10.2007	PLSI2	1.00l	UNINSTALL_DEVICE
04.10.2007	PAT_GEN	1.00c	UNINSTALL_DEVICE
15.10. 2007	TAC / TA2	1.16i	INPUT/SHIFT/I2C
22.10.2007	TAC / TA2	1.16j	SCAN_OR_SKIP (Neu: Reverse)
29.10.2007	TAC / TA2	1.16k	MAKE_PACKET / INSTR

## Chronological

03.12.2007	SER1B	1.03f	RTS works correct as I/O
20.12.2007	TAC / TA2	1.16l	MAKE_PACKET / SCAN_OR_SKIP (bugfix)
15.01.2008	Analog3x	1.00a	First version
15.01.2008	Ser5	1.00a	First version
06.02.2008	TAC / TA2	01.16m	I2C low => Error with PRN driver
25.02.2008	TAC/TA2	01.16n	VAL_REAL => fixed Error with more than one separator in one number
17.03.2008	TAC/TA2	01.16o	GRAPHIC_MIRROR XY => fixed a bug where in some cases two bytes were not mirrored
08.04.2008	MHZ4	01.00a	Generates 4MHZ @ L86
09.05.2008	TAC/TA2	01.16p	I2C clock stretching
20.05.2008	TAC/TA2	01.17a	FPGA Functions / Recursive Task switching
23.05.2008	SER_XUART	1.00g	Output with count.
11.06.2008	SER1B	1.03g	Baudrates 32.250 & 62.500
24.06.2008	TAC/TA2	01.17b	I2C clock stretching Start & Stop cond.
25.06.2008	TOUCHPANEL	1.00n	XPORT bug fixed
08.07.2008	TOUCHPANEL	1.00o	Big slider values & auto repeat
09.07.2008	TAC/TA2	01.17c	XIN\$, XIN16\$, XIN24\$ with Delay.
13.08.2008	PLSI2	1.00m	L74-L77 available
13.08.2008	FREQ1	1.00n	L74-L77 available
14.08.2008	TAC/TA2	01.17d	RELEASE_TSW_NESTED & READ_TSW_NESTED
29.09.2008	TOUCHPANEL	01.00p	Beep
07.10. 2008	SER2	1.00l	Wrong initial level TE fixed
08.10. 2008	SER5	1.00b	Wrong initial level TE fixed
22.10.2008	TOUCHPANEL	01.01a	Beep on XPORT possible
10.11.2008	XIN_SR	01.00b	Port-3 pin direction bug fixed
10.11.2008	LCD-S1D13700	01.00i	Bug with stri\$ / REAL fixed
02.12.2008	TA2	01.17e	Bugfix: DISTRIBUTE\$

## Chronological

04.12.2008	TAC/TA2	01.17f	XIN\$ / XOUT
04.12.2008	LCD1	01.02a	Signals using XPorts
05.12.2008	SER_XUART	01.00h	Signals using XPorts
05.12.2008	TOUCHPANEL	01.01b	Signals using XPorts
05.12.2008	XIN_SR	01.00c	Signals using XPorts
17.12.2008	TAC/TA2	01.17g	PM_MIN, POKEM_FLASH, TEST_RAM
17.12.2008	ANALOG1	01.01g	8-Bit values
09.01.2009	LCD-S1D13700	01.00j	Bug offset length fixed
12.01.2009	TAC/TA2	01.17i	LIMIT, STR\$, SCAN_OR_SKIP
15.01.2009	LCD-S1D13700	01.00k	UFCL_STAT_TEXT & UFCL_STAT_GRAPHIC
15.01.2009	RTC1	01.01d	Day of week
13.02.2009	CAN	01.00l	RTR, receive, buffer
13.02.2009	CAN	01.00m	Tiger2: IBUF OVL error
24.02.2009	CAN	01.00n	RTR Messages send
03.03.2009	CAN	01.00o	No hysteresis
25.03.2009	SER1B	01.03h	UFCL_SER_TX_ACT
16.04.2009	IDE	5.4.1	Higher Com ports; Name template @RootDir for include directories; Bug fix – real constants in expressions.
16.04.2009	Memory Cards	1.3.1	Bug fix – writing data over cluster boundary.
15.05.2009	SER2	1.00m	Bug fix – Parity calculation
10.06.2009	SER2	1.00n	INPUT
17.06.2009	CNT1	1.00o	1 TimerA Slot per driver
19.06.2009	SHI	1.00h	L37 as clock pin (Tiger-2)
26.10.2009	TAC/TA2	01.17k	UNIVERSAL_CONVERT\$
12.11.2009	TAC/TA2	01.17l	DISTRIBUTE\$
26.11.2009	TAC/TA2	01.17m	SIGNAL_GAP_END
15.12.2009	TAC/TA2	01.17n	UPDATE_ME_FILE_INFO\$
20.01.2010	TAC/TA2	01.17o	MODULO_INC bugfix

## Chronological

21.01.2010	SER1B	01.03j	MDB/Vending; new baudrates
09.02.2010	TAC/TA2	01.17p	SPI_IO\$
08.03.2010	ANALOG2	01.01f	single channel 0...11 possible
15.03.2010	TAC/TA2	01.18a	PROGHASH, PM_SMALL_W2, SYSVARN function BAS_PROG_LEN
14.04.2010	TAC/TA2	01.18b	Internal changes
16.12.2010	LCD-6963	01.01m	RAIO Controller
03.05.2011	ANALOG2	01.01g	Read out UFUNC (Tiger-2)
02.01.2012	TAC/TA2	01.18c	UPDATE_ME bug fixed
21.02.2012	LCD1_4BIT	01.00b	Public Access on wrong nibble
24.08.2012	LCD-S1D13700	01.00l	INSTALL_DEVICE driver error fixed
08.01.2013	TAC/TA2	01.18d	I2CL Speed Reduction
19.02.2013	TAC/TA2	01.18e	I2CL RST_Pin
03.04.2013	CAN	01.00p	Bugfix fast data
27.07.2013	PLSI2	01.00n	Brief starting pulse
25.04.2014	LCD1	1.02b	Use with fast XBUS Interrupts
25.04.2014	PAT_GEN	1.00d	XOR works correct
17.04.2014	TAC/TA2	01.18f	X-Port_DI Functions
10.07.2017	TAC/TA2	01.18g	CUT_BITS



## TAC/TA2

### 1.15l

**Date:** 15.3.2007

**Description:** New function GRAPHIC\_ROTATE  
Extensions for I2CL  
PROJECT\_MODEL MEDIUM

UPDATE\_ME allows compiled versions for other Tiger. Example: File  
compiled for Tiger 1/4 can be updated in Tiger 4/16.

UPDATE\_ME recovery function => no problem with power failure.

**Files:** GRAPHIC\_ROTATE\_002.PDF  
I2CL\_EXTENSION.PDF

### 1.15m

**Date:** 21.3.2007

**Description:** XIN\$ bug fixed. Before this version, Tiger can crash. You need this  
version to run the Tiger2 with EM03, EM03 doesn't work with earlier  
versions.

### 1.15n

**Date:** 15.5.2007

**Description:** UPDATE\_ME bug fixed (big next generation program, after update me,  
flash is empty)

### 1.15o

**Date:** 31.5.2007

**Description:** Graphic Rotate SRC can be FLASH  
Graphic Rotate String length bug (Tiger-1)

### 1.15p

**Date:** 08.06.2007

**Description:** XPort16 & XPort24

## TAC/TA2

### 1.16a

**Date:** 02.07.2007

**Description:** Update Me works fine with speedsubs and speedtasks

### 1.16b

**Date:** 09.08.2007

**Description:** I2C Delay is limited to 255 (before it was limited to 10). Please note that this could slow down the speed in real time multitasking programs

### 1.16c

**Date:** 13.08.2007

**Description:** new I2CL\_SETUP with 6. parameter for separate delay at clock-bit 9 (ACK)

### 1.16d

**Date:** 21.08.2007

**Description:** SIGNAL\_AVERAGE bug fixed. Parameter *Number* > 8 is possible without errors.

### 1.16f

**Date:** 10.09.2007

**Description:** New Function CALIBRATE\_LONG. Bug fix: SET\_DOT (displacement)

### 1.16g

**Date:** 20.09.2007

**Description:** enhancement of SCAN\_OR\_SKIP: Separator flag tab from Flash

### 1.16h

**Date:** 01.10.2007

**Description:** this version supports the new UNINSTALL\_DEVICE functionality

1.16i

**Date:** 15.10.2007

**Description:** I2CL: Speed reduction was split to 50% High clock and 50% Low clock, before it was 100% high clock => longer low period of clock  
Slow down of SHIFT\_OUT/SHIFT\_IN via SET\_SYSVARN is possible to a value of 40.  
INPUT\_LINE and INPUT is possible with timeout. Timeout is set with SET\_SYSVARN(2, timeout)

1.16j

**Date:** 22.10.2007

**Description:** SCAN\_OR\_SKIP: Added a fifth parameter to set the direction of scanning/skipping: Zero: normal direction (from given start position to the end of the string); Non-zero: reverse (from the start position to the beginning of the string)

1.16k

**Date:** 30.10.2007

**Description:** INSTR: the INSTR-function now supports searching in and with flash-data (though the length of the data has to be specified by the user via an additional parameter)

1.16l

**Date:** 20.12.2007

**Description:** bug fix: SCAN\_OR\_SKIP (scan/skip forward/reverse now works correctly)

## TAC/TA2

### 1.16m

**Date:** 06.02.2008

**Description:** bug fix: I2CL could have errors, if a device driver (e.g. PRN1) uses the same Port

### 1.16n

**Date:** 25.02.2008

**Description:** bug fix: VAL\_REAL had problems with more than one separator per number. now number recognition stops if a second separator is detected

### 1.16o

**Date:** 25.02.2008

**Description:** bug fix: GRAPHIC\_MIRROR with XY mirroring: in some special cases two bytes were not mirrored

### 1.16p

**Date:** 09.05.2008

**Description:** I2C clock stretching

### 1.17a

**Date:** 20.05.2008

**Description:** New Functions FPGA\_SETUP & FPGA\_PROGRAM  
ENABLE\_TSW\_NESTED, DISABLE\_TSW\_NESTED, RESET\_TSW\_NESTED

### 1.17b

**Date:** 24.06.2008

**Description:** There was no I2C clock stretching in I2CL\_START & I2CL\_STOP available. Fixed.

1.17c

Date: 09.07.2008

Description: XIN\$, XIN16\$ and XIN24\$ with Delay (slow down a bit if necessary).

1.17d

Date: 14.08.2008

Description: RELEASE\_TSW\_NESTED & READ\_TSW\_NESTED

1.17e

Date: 02.12.2008

Description: Tiger-2 only version: Bugfix: DISTRIBUTE\$ works correct.

1.17f

Date: 04.12.2008

Description: There could be problems with using XIN\$/XOUT with negative address (<ADR><DATA><DATA>...<DATA>) and device drivers with XPORT (eg. LCD1). One scenario is LCD1 together with the EM03 module. The device driver changed the address while XIN\$/XOUT are working. If there is a device driver which uses the XPorts, the address will be repeated now. Ensure to use the newest version of the device drivers.

1.17g

Date: 17.12.2008

Description: - new version for PM\_MIN (little more flash used)  
- pokem flash: If the program was compiled for a smaller flash Version (eg. 4/4), it was not possible to use whole flash on bigger modules (eg. 16/32). Fixed.  
- same issue for Ram with TEST\_RAM function.

## TAC/TA2

### 1.17i

**Date:** 12.02.2009

**Description:** - Bug: LIMIT does not work correct, if Max-Min>=7FFFFFFh. Fixed  
- Bug: SCAN\_OR\_SKIP does not work with passed reverse parameter and Flash charset table. Fixed.  
- str\$ for real variables shows QNaN, SNaN, +INF and -INF

### 1.17k

**Date:** 26.10.2009

**Description:** Bug: UNIVERSAL\_CONVERT\$ (Tiger-2) - String is 2 Bytes too long. Fixed.

### 1.17l

**Date:** 12.11.2009

**Description:** Bug: DISTRIBUTE\$ fills up unused bits at the end with GapFill.

### 1.17m

**Date:** 26.11.2009

**Description:** Bug: SIGNAL\_GAP\_END crashes. Fixed.

### 1.17n

**Date:** 15.12.2009

**Description:** new function: UPDATE\_ME\_FILE\_INF\$

### 1.17o

**Date:** 20.01.2010

**Description:** MODULO\_INC: invalid input values are limited between MIN and MAX before incrementing

### 1.17o

**Date:** 09.02.2010

**Description:** Bug: SPI\_IO\$ (only Tiger 2) sends wrong number of Bytes for strings with a length of more than 7 Bytes. Fixed.

## TAC/TA2

### 1.18a

**Date:** 15.03.2010

**Description:** - New function: PROGHASH (calculates hash code from BASIC program) requires Tiger BASIC IDE 5.4.4  
- New sysvarn function: BAS\_PROG\_LEN (read out length of BASIC program without driver, TAC files and user flash)  
- Project model: PM\_SMALL\_W2

### 1.18b

**Date:** 14.04.2010

**Description:** - important internal changes

### 1.18c

**Date:** 02.01.2012

**Description:** - UPDATE\_ME bug fixed. Bug: If the new generation uses data flash or the function SET\_SERIAL\_NO, it is possible, that the Tiger loses the program permanently and must be reprogrammed in PC Mode.

### 1.18d

**Date:** 08.01.2013

**Description:** -I2CL: Speed reduction now effects  
\* data hold time  
\* data set-up time  
\* clock length  
\* start/stop condition (delay between clock/data)

### 1.18e

**Date:** 19.02.2013

**Description:** -I2CL: Parameter RST\_Pin: All values other than 0...7 cause NO Reset pin

### 1.18f

**Date:** 17.04.2014

**Description:** -XOUT\_DI, XSET\_DI, XRES\_DI & XINV\_DI

.....  
**TAC/TA2**

.....  
**1.18g**

.....  
**Date:** 10.07.2014

.....  
**Description:** -CUT\_BITS count >=32 fixed



## Driver

## Driver

### CAN

#### 1.00j

**Date:** 15.3.2007

**Description:** Receive up to 15 mailboxes (different access codes and one more access mask). Documentation was extended.  
Problem with 2 PUTs following directly is solved.

**Documentation:** see "Manual\_addendum\_TINY\_Tiger 2"

#### 1.00k

**Date:** 27.4.2007

**Description:** internal buffer handling bug was fixed  
(Before bug fix, CAN.TD2 could sent few wrong Frames or wrong IDs)

#### 1.00l

**Date:** 13.2.2009

**Description:** Tiger-2: After receiving a RTR request, no other message can be send.  
Fixed.  
Tiger-1: After receiving any message the buffer is filled to maximum.  
Fixed.  
Only the first RTR request is served. Fixed.  
Other minor fixes and enhancements.

#### 1.00m

**Date:** 16.2.2009

**Description:** Bug Tiger-2: In case of a receive buffer overflow, following data will not be received or rather not saved into the input buffer. Fixed.



Driver

PLSOUT1

1.00l

Date: 21.3.2007

Description: New User Function code to set new count of pulses and one to add new pulses to the rest.

Documentation: parameters are of correct data type now.

Reading out the rest pulses works fine.

SOFT STOP is possible for endless pulses.

1.00m

Date: 01.6.2007

Description: New User Function Code: UFCO\_OPL\_SET\_LEV (sets level, if pulses are stopped)

SER\_XUART

1.00f

Date: 20.3.2007

Description: no Tiger-2 crashes any longer. In some cases, Tiger-2 crashed while PUT data to the device driver.

1.00g

Date: 23.5.2008

Description: Output with 3 Parameters (count) will always send the maximum string length with Tiger-2. Fixed.

Other minor bugs fixed.

## Driver

### 1.00h

**Date:** 05.12.2008

**Description:** SER\_XUART signals that XPORTs are used. This ensures that XIN\$/XOUT works correct with negative addresses (<ADR><DATA><DATA>...<DATA>). This mechanism is used in Tac files from version 1.17f.

## SER\_1B

### 1.02o

**Date:** 27.11.2006

**Description:** CTS disable via User Function Code

### 1.02p

**Date:** 24.05.2007

**Description:** bug fixed: RS-485 TE is high after transmission is finished, this problem is solved

### 1.03a

**Date:** 24.05.2007

**Description:**

- it is possible to change the RTS0 pin for Econo Tiger™
- RTS will be reset, if there are more than 20H free Bytes in buffer
- RTS will be reset after input buffer erase

### 1.03b

**Date:** 01.06.2007

**Description:** bug fixed: buffer handling of R02(64 Bytes) & R05(128 Bytes), erroneous data with small buffers in previous versions

### 1.03c

**Date:** 14.06.2007

**Description:** bug fixed: UFCO\_OBU\_ERASE works correct again (erroneous from version 1.03a)

## Driver

### 1.03e

**Date:** 04.07.2007

**Description:** new baud rates: 41.600 & 100.000

### 1.03f

**Date:** 03.12.2007

**Description:** enabling RTS pin as I/O works fine. RTS will not be served from the device driver.

### 1.03g

**Date:** 11.06.2008

**Description:** Baudrates 31.250 & 62.500 activated

### 1.03h

**Date:** 25.03.2009

**Description:** new User Function Code UFCL\_SER\_TX\_ACT

### 1.03i

**Date:** not published

**Description:** - more precisely baudrate of 9.600 (0,16%)  
- Multi Drop Bus / Vending: Transmit with 2 Bytes per data. 1. Byte is the state of the Modebit 2. Byte is 8-bit data  
- Lock transmit buffer until Mode Bit is received with UFCL\_SER\_TX\_LOCK

### 1.03j

**Date:** 21.01.2010

**Description:** new baudrate: 26.000 Baud

## Driver

### LCD-S1D13700

#### 1.00h

**Date:** 26.03.2007

**Description:** older drivers cause errors in string operations during LCD output.

#### 1.00i

**Date:** 10.11.2008

**Description:** Bug: LCD-S1D13700 could cause errors in the stri\$ function with real variables. The string probably contains wrong results sometimes. Could have other effects on real variables. Fixed.

#### 1.00j

**Date:** 08.01.2009

**Description:** Bug: Probably no output, if 2 Layers are used with offsets and/or length. Fixed!

#### 1.00k

**Date:** 15.01.2009

**Description:** new User Function Codes UFCI\_STAT\_TEXT & UFCI\_STAT\_GRAPHIC, to read out if text/graphic mode is active.

#### 1.00l

**Date:** 24.08.2012

**Description:** Bug: install\_device with manual parameters probably outputs device driver error. Fixed!

## **TOUCHPANEL**

### **1.00i**

**Date:** 24.04.2007

**Description:** new Function: Beep / Key click

Bug fix:

- Contact Flag

- X-Port system (possibly errors with other X-Port devices, e.g. EM03)

### **1.00j**

**Date:** 27.04.2007

**Description:** new Function: alternative key Buffer on Sek-4 (Key attribute Bit-6)

You need this version for the Tiger Graphic Library

### **1.00k**

**Date:** 15.05.2007

**Description:** Bug with attributes NO AUTOREPEAT and ALTERNATIVE BUFFER was fixed.

### **1.00l**

**Date:** 02.08.2007

**Description:** detecting length, that touchpanel is pressed was increased and is adjustable per User Function Code TP\_PRESSED\_NUM

### **1.00m**

**Date:** 09.08.2007

**Description:** you need this version for the use with Analog2.tdd

### **1.00n**

**Date:** 25.06.2008

**Description:** Bug: Bus problems on Data Bus with several XPORT Devices, eg. EP33 (SER\_XUART). Touchpanel does not work correct. Fixed.

## Driver

### 1.00o

**Date:** 08.07.2008

**Description:** Big slider values (>7FFFH) doesn't work. Fixed.  
Auto repeat with alternative buffer doesn't work correct. Fixed.

### 1.00p

**Date:** 29.09.2008

**Description:** Tiger-1: Beep pin could wrongly affect other pins. Fixed.

### 1.01a

**Date:** 22.10.2008

**Description:** Beep on XPORT possible. Default for TP-1000 with Tiger-1.

### 1.01b

**Date:** 05.12.2008

**Description:** TOUCHPANEL signals that XPORTs are used. This ensures that XIN\$/XOUT works correct with negative addresses (<ADR><DATA><DATA>...<DATA>).  
This mechanism is used in Tac files from version 1.17f.

### 1.01c

**Date:** 25.02.2009

**Description:** Default scan ADC value (ADP) is reduced to 8 (before 20). It is more easily possible to touch the bottom left corner of the touchpanel.

## PLSI2

### 1.00k

**Date:** 24.05.2007

**Description:** it is possible to compile with Tiger-2 now without errors



## Driver

### 1.00l

**Date:** 4.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

### 1.00m

**Date:** 13.08.2008

**Description:** Pins L74...L77 available for Tiger-2

### 1.00n

**Date:** 24.07.2013

**Description:** Secondary address 1: generates short starting pulse

## LCD-SED1520

### 1.00a

**Date:** ---

**Description:** BETA version.

### 1.00b

**Date:** 05.06.2007

**Description:** first release.

## RTC1

### 1.01b

**Date:** 14.06.2007

**Description:** it is not possible, to set day or month to 0 with secondary address 3. If 0 is passed to the driver, the driver automatically sets the value to 1.

### 1.01c

## Driver

**Date:** 05.07.2007

**Description:** Tiger-2:  
all months are shown in English language in clear text string  
setting the last day of a month with seconds (secondary address 0)  
works fine with this version

## 1.01d

**Date:** 15.01.2009

**Description:** Tiger-2:  
Day of week will be calculated automatically by the device driver. You  
need to pass 7 Bytes to set the time in numerical string. Every further  
byte will be ignored.

## PLSIN1

### 1.00m

**Date:** 22.06.2007

**Description:** Tiger-2: It's possible to use L37 as input pin (instead of L84, only one  
pin is possible)  
⇒ Tiger-2 V0.17 or higher needed !!!

## LCD1

### 1.01p

**Date:** 02.07.2007

**Description:** it is possible to set the BUS-address for LC-Display to Port 7 (Tiger-2  
only)  
Please note: This is NOT recommend, please use the standard  
connection on Port 6 if possible!!!

### 1.02a

**Date:** 04.12.2008

**Description:** LCD1 signals that XPORTs are used. This ensures that XIN\$/XOUT works  
correct with negative addresses (<ADR><DATA><DATA>...<DATA>).  
This mechanism is used in Tac files from version 1.17f.

## Driver

### 1.02b

**Date:** 25.04.2014

**Description:** erroneous behaviour can appear in combination with XPORT in fast Interrupts. Fixed!

## Analog3

### 1.00j

**Date:** 04.07.2007

**Description:** first release for Tiger-2

## Analog2

### 1.01d

**Date:** 09.08.2007

**Description:** you need this version for the use with touchpanel.tdd

### 1.01e

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

### 1.01f

**Date:** 08.03.2010

**Description:** single channel 0...11 possible  
every channel uses its own trigger level, even in single channel mode

### 1.01g

**Date:** 03.05.2011

**Description:** Tiger-2 bug: read out User Function Codes. Fixed.

**Driver**

**Pwmin**

**1.00g**

**Date:** 24.09.2007

**Description:** interference revised,  
initial values revised,  
if Input pin is connected to VCC or GND, return value is (4096, 0) or (0, 4096)

**SER2**

**1.00k**

**Date:** 01.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**1.00l**

**Date:** 07.10.2008

**Description:** Wrong initial level of transmit enable pin at install device. Fixed!

**1.00m**

**Date:** 15.05.2009

**Description:** Bug: Parity calculation. Fixed.

**1.00n**

**Date:** 10.06.2009

**Description:** Bug: INPUT will affect uninitialized strings or wrong data with Tiger-2. Fixed.

**Driver**

**ENC1**

**1.00l**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**SET1**

**1.00e**

**Date:** 04.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**RES1**

**1.00e**

**Date:** 04.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**XOR1**

**1.00e**

**Date:** 04.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**Driver**

**TMEM**

**1.00h**

**Date:** 04.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**PWM2**

**1.01f**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**FREQ1**

**1.00m**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

**1.00n**

**Date:** 13.08.2008

**Description:** Pins L74...L77 available for Tiger-2

**CNT1**

**1.00n**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

## **Driver**

### **1.00o**

**Date:** 17.06.2009

**Description:** in case of counting on 2 channels, only 1 TimerA Slot is needed

## **PLSO2**

### **1.01g**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

## **PAT\_GEN**

### **1.00c**

**Date:** 02.10.2007

**Description:** UNINSTALL\_DEVICE functionality is available (needs: TAC version 1.16h)

### **1.00d**

**Date:** 25.04.2012

**Description:** XOR possibly just set and res. Fixed.

## **ANALOG3X**

### **1.00a**

**Date:** 15.01.2008

**Description:** first version

**Driver**

**SER5**

**1.00a**

**Date:** 15.01.2008  
**Description:** first version

**1.00b**

**Date:** 08.10.2008  
**Description:** Wrong initial level of transmit enable pin at install device. Fixed!

**MHZ4**

**1.00a**

**Date:** 08.04.2008  
**Description:** generates 4 MHz @ L86

**XIN\_SR**

**1.00b**

**Date:** 10.11.2008  
**Description:** Bug: Pin direction of Port-3 changed. This can result in problems with the RTC device driver for example. Fixed.

**1.00c**

**Date:** 05.12.2008  
**Description:** XIN\_SR signals that XPORTs are used. This ensures that XIN\$/XOUT works correct with negative addresses (<ADR<DATA<DATA>...<DATA>). This mechanism is used in Tac files from version 1.17f.



## Driver

## ANALOG1

### 1.01g

**Date:** 17.12.2008

**Description:** Bug: Tiger-2 reads in 10-Bit values, even if a length of 1 is given. Fixed.

## SHI

### 1.00h

**Date:** 19.06.2009

**Description:** Tiger-2: L37 is available as clock-pin.

## LCD-6963

### 1.01l

**Date:** 13.9.2010

**Description:** LCD Type No. 12: 240x64 px (Palm Technology)

### 1.01m

**Date:** 16.12.2010

**Description:** compatibel to RAIO Controllerexample install for Tiger-2:  
install\_device #LCD, "LCD-6963.TD2", &  
6, & 'Logical address data bus (6 or 8)  
8, & 'Logical address ctrl-lines (4, 6, 7, 8 or 9)  
1, & 'WR Bit-Position  
0, & 'RD Bit-Position  
4, & 'CE Bit-Position  
3, & 'C/D Bit-Position  
4, & 'LCD-Type  
150, & 'KByte/Sec  
17h 'Delay

Driver

LCD1\_4BIT

1.00a

Date: 02.07.2010

Description: First version of 4-Bit Bus LCD1 Device Driver

1.00b

Date: 21.02.2012

Description: Tiger-1 bug: The wrong nibble (4 Pins) of Data-Bus is set to Input direction after install\_device and you get a public access error at the unused nibble. Fixed.

## IDE

### 5.4.1

**Date:** 16.4.2009

**Description:** - the list of available Com ports is extended up to 4096 (previously, 256).

- the name template "@RootDir" is accepted for the include paths in the dialog box "Options/Directories". This name template is thought for shorting the include paths that reference the include files delivered as libraries by Wilke Technology GmbH. The name template "@RootDir" references the main directory where the Tiger Basic software was installed.

- Bug fix: in expressions with constants of type REAL containing the signs in the exponents and written without blanks to operation sign. E.g.:  $rv = 6.5E-03+1.1$  caused errors during compilation.

Libraries

## Libraries

### Memory Cards

#### 1.3.1

**Date:** 16.4.2009

**Description:** Bug fix: The writing data to an SD card over cluster boundary in FAT worked incorrectly.