

PCD3.T66x FW 1.16.69 Release Notes

1 Summary of Firmware versions

This summary presents a short description of all firmware versions which are set on PCD3.T66x at the production (official versions and exceptionally some intermediate versions \$).

2 Important:



3 Features or restrictions specifications

3.1 General

- Needed Programming Tool
Not usable with PG3 & PG4
To program a PCD3.T66x a PG5 V \$2.0.151 or newer has to be used.
- Register extension:
Up to 16383 Registers
- FBox library
The Fbox of the analogue modules W1, W2 & W5 only working from PG5 V \$1.3.010 or newer.
- FW update
The FW can be updated with the FWdnld.exe program located in the PG5 directory.
- CPLD programming:
There is no CPLD programming.
- New Configuration with PG5 2.0 SPI for: 1.16.00
 - FTP /File system
 - New web-server / HTTP direct
 - TCPIP/ enhancements:
 - DHCP/DNS
 - SNTP
 - PPP
 - SNMP
 - Bluetooth

3.2 Not implemented features on PCD3.T66x

- Mode MM4
- LAN2:
- Mode D
- S-Bus-RIO as master.
- PROFIBUS FMS
- LON
- Program backup to PCD7.R500
- SYSWR 900x
- PROFIBUS DP
- Profi-S-IO

3.3 Memory

- User memory:

System	HW Revision	User memory	Onboard File System
		Code/Text/DB	
T665	-	32 kbytes	512 kbytes
T666	-	128 kbytes	512 kbytes



- EEPROM: **1.16.00**
 - The S-Bus configuration is automatically saved in the EEPROM.
 - There are 50 non-volatile user registers.
- Registers: **1.16.00**
 - Up to 16383 Registers
- Flags: **1.16.00**
 - Up to 14336 Flags

Instructions

Please refer to the following list which indicates the first firmware version used in production supporting the relevant feature.

- Peripheral instructions **1.16.00**
- PB, FB Temporary Data **1.16.00**
- 2000 FB's, 1000 PB's, 32 COB's **1.16.00**
- FB call depth of 31. **1.16.00**
- IEEE floating point instruction for single and double **1.16.00**
- Signed extension instruction EXTB, EXTW **1.16.00**
- SF for text **1.16.00**

3.4 Communication

- Serial communication (not for T665):
 - Baudrates up to 115k Baud on port 1 & 2 **1.16.00**
 - No Baudrates < 1200 on all port **1.16.00**
 - Serial port (not for T665)
 - The port 1 have a full RS 232 if it is equipped with F121 **1.16.00**
 - The port 2 is for RS485 & Profi-S-Net **1.16.00**
 - New Serial port with PCD3.F27x (M-Bus) (not for T665)
 - Port 100 & 101 on Slot 0 **1.16.00**
 - Port 110 & 111 on Slot 1 **1.16.00**
 - Port 120 & 121 on Slot 2 **1.16.00**
 - Port 130 & 131 on Slot 3 **1.16.00**
 - Modem (not for T665):
 - Auto answer modem on port 1 (analog & ISDN) **1.16.00**
 - (please contact SAIA-Burgess Controls for more information)
- S-Bus
 - Baudrates up to 115k Baud on port 1 & 2 **1.16.00**
 - No break modes as master and slave. **1.16.00**
 - CSF for Send/Recv. **1.16.00**
- Communication on TCP/IP :
 - Classless inter domain router **1.16.00**
 - S-Bus over IP **1.16.00**
 - "Open data mode" over IP with max. 32 ports / 32 connections **1.16.00**
 - S-Bus GWY Master over IP **1.16.00**
 - 255 ARP table entries **1.16.00**
- WEB server **1.16.00**
- WEB server with HTTP direct connection **1.16.00**

- WebServer2 **1.16.00**
- PPP (Point to Point Protocol) **1.16.00**
 - Configuration through file, WEB-CGI and CSF
 - No FBox support
 - All serial ports available
- SNTP (Simple Network Time Protocol) **1.16.00**
 - Configuration through file and WEB-CGI
- DHCP **1.16.00**
- DNS **1.16.00**
- SNMP **1.16.00**
- PING **1.16.00**
- Config Tags for eDisplay **1.16.00**
- No limitation with the baudrate configured/assigned. **1.16.00**
- Multi PGU (incl. modem) **1.16.00**
- S-Bus over USB **1.16.00**
- MODBUS Driver over TCPIP, UDP and serial **1.16.00**
 - Accessible over CSF calls only
 - Serial port 1 and 2. (not for T665)
 - No support for F2xx serial lines (port 100 .. 131)
- Ether-S-IO **1.16.00**
 - Support Ether-S-IO Protocol
- M-BUS Communication modules supported (PCD2.F2700, PCD2.F2710, PCD2.F2720, PCD2.F2730) **1.16.48**
 - Support for these modules with "Frame" protocol
- DALI Communication modules supported (PCD2.F2610) **1.16.48**
 - Support for these modules with "Frame" protocol

3.5 Miscellaneous

- IL code of analogue modules W1, W2 & W5 must change (see manual). **1.16.00**
- New features for PG5. **1.16.00**
 - New OUTL and OUTLX instructions
 - New synchronization for a bloc downloads in mode "RUN"
 - Possibility to upload data (SEDIT and SFUP) in a synchronized manner.
- XOB **1.16.00**
 - XOB 20-21: interrupt inputs XOB's **1.16.00**
 - XOB 14, 15, 25-29 Time Cyclic Alarm **1.16.00**
 - can be executed from 1 ms to 1000s with 1ms steps **1.16.00**

- can be executed only one time with SYSWR 41xx **1.16.00**
- XOB 17, 18, 19: User XOB's **1.16.00**
 - This XOB's which can be provoked via S-BUS telegram (STXM chan, 0, k 4000, k 17..19) or SYSWR command (K4017..K4018).
 - The XOB's are only executed if the CPU is in RUN or CONDITIONAL RUN.
- XOB 7: System overload XOB **1.16.00**
- XOB 1 and 2 Status call (see manual) **1.16.00**
- XOB 1 and 2 Status call (see manual) **1.16.00**
- New XOB handling.
 - The XOB's are split in 2 priorities. A higher prior XOB can interrupt the lower prior XOB. (see manual)
- XOB 32-63: configurable for CAN (PCD3.M6340, PG5 V\$1.3.127) **1.16.00**
- XOB 3 for task and Task data overflow **1.16.00**
- Calculation of week and day number **1.16.00**
 - The PCD compute the day and the week number based on the date using the same algorithm as in the PG. The command 'Write Clock' corrects automatically the week number or day number if they are wrong.
- Password mechanism. **1.16.00**
- File system. **1.16.00**
 - CSF asynchron **1.16.00**
 - File devices (2 internal, no external Flashcards) **1.16.00**
 - Onboard File system for configuration files **1.16.00**
- FTP server **1.16.00**
- Alarm DB **1.16.00**
 - Number of parameters changed **1.16.00**
- Data Initialisation DBX **1.16.00**
- "Memory lost" history entry **1.16.00**

4 Information for FW updating.

If the Bootloader does not support the FW download via SBUS network the Download Fails.

Please try then with the RUN/STOP switch.

FW update on old FW (or old Booter)

The old FW of the PCD3.Mxxxx can be updated via serial line port 0 or USB in PGU mode.

Before starting the FW update the FW must be set in the Loaderstate:

1. PLC power on
2. Switch the RUN/STOP switch two times up and down while RUN LED is blinking.
The LEDs indicate that there is no FW.

! After the completion of a FW download, shown by the FW downloader taskbar, the code is then copied from the RAM to the FLASH. During this procedure, which takes about 30 sec, the RUN, HALT and ERROR LED's blink in a certain sequence.

