# SAIA-Burgess Electronics

**SWITCHES • MOTORS • CONTROLLERS**

# PCD6.M100/M210/M220/M230/M250/M260

| Features | Comments | P100 ≥ V. | P300 ≥ V. | P400 ≥ V. | FW ≥ V. | HW ≥ V. | Remarks |
|---|---|---|---|---|---|---|---|
| **1.** | **New instructions** | | | | | | |
| CPBI | Call Program Block Indirect | 003 | 1.7 | 1.4 | 007 | x | |
| DEFTR | Define Timer Resolution | --- | --- | --- | --- | --- | not implemented |
| PID | Instruction has been rewritten | --- | --- | --- | --- | --- | not corrected, only the |
| | Selection of the old algorithm | --- | --- | --- | --- | --- | old algorithm is used |
| SASII | New indirect instruction | --- | --- | --- | --- | --- | not implemented |
| SYSCMP | System Compare | --- | --- | --- | --- | --- | not implemented |
| SYSRD | System Read | --- | --- | --- | --- | --- | not implemented |
| SYSWR | System Write | --- | --- | --- | --- | --- | not implemented |
| TEST | New Test instruction | 003 | 1.9 | 1.4 | 009 | x | |
| TFR | Transfer Data | 003 | 1.7 | 1.4 | 007 | x | Data Blocks and Texts |
| TFRI | Transfer Data Indirect | 003 | 1.9 | 1.4 | 009 | x | Data Blocks and Texts |
| **2.** | **Memory extension** | | | | | | |
| Data Block | Put and Get (transfer media) | 002 | 1.5 | 1.4 | 005 | x | see also Texts |
| | 0...3999, up to 383 registers | 003 | 1.5 | 1.4 | 008 | x | |
| | 4000 to 7999, up to 16 KByte | 003 | 1.8 | 1.4 | 008 | C | with PCD6.R210/R600 |
| | Transfer of DB's over S-BUS | ----- | 1.9 | 1.4 | 009 | x | |
| Memory | Extension : up to 1 MByte | 003 | 1.7 | 1.21 | 007 | C | with PCD6.R210/R600 |
| | Memory extension security | 003 | 1.8 | 1.4 | 008 | C | for DB's structure |
| Texts | Put and Get (transfer media) | 002 | 1.5 | 1.4 | 005 | x | see also Data Blocks |
| TFR | Transfer Data (new inst.) | 003 | 1.7 | 1.4 | 007 | x | see new instructions |
| TFRI | New indirect instruction | 003 | 1.9 | 1.4 | 009 | x | see new instructions |
| **3.** | **Communication** | | | | | | |
| S-BUS | Level 1 up to 38.4 KBd | --- | 1.7 | 1.21 | 007 | x | |
| | Level 2 up to 38.4 KBd | --- | 1.7 | 1.21 | 007 | x | PCD8.K111 required |
| | up to 38.4 KBd optimised | --- | --- | --- | --- | --- | not implemented |
| | Broadcasting PCD as master | --- | 1.6 | 1.21 | 008 | x | |
| | Broadcasting PC as master | --- | 1.9 | 1.21 | 008 | x | with the Debugger |
| | Data Mode | --- | --- | --- | --- | --- | not implemented |
| | Download Configuration | --- | --- | --- | --- | --- | not implemented |
| | Gateway | --- | 1.9 | 1.3 | 009 | x | |
| | Modem : Private line | --- | 1.7 | 1.21 | 007 | x | |
| | Public line | --- | 1.7 | 1.3 | 007 | x | |
| | Reset/Init string | --- | 1.9 | 1.3 | 009 | x | |
| | Modem + | --- | 1.9 | 1.3 | 009 | x | |
| | Radio modem up to 4'800 Bd | --- | 1.9 | 1.21 | 009 | x | TFUL mechanism |
| | RIO functionality | --- | --- | --- | --- | --- | not implemented |
| | SRXM extension | 003 | 1.9 | 1.4 | 009 | x | read system info slave |
| | STXMI and SRXMI | 003 | 1.9 | 1.4 | 009 | x | to transfer DB's |
| | Write station number (Debug.) | 003 | 1.9 | 1.21 | 009 | x | |
| | XOB 17,18,19 | --- | 1.9 | 1.4 | 009 | x | |

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| **3.** | **Communication** (continued) | | | | | | |
| LAN2 | Only with co-processor T1.. | 002 | 1.6 | 1.4 | 007 | x | PCD6.T1.. with V005 |
| LON | Interface PCD7.F8x0 | --- | --- | --- | --- | --- | not implemented |
| MC4 | Character Mode for RS 485 | 002 | 1.5 | 1.4 | 005 | x | PCD6.M120 - Port 0 |
| MD/SD | Master/slave (full duplex) | 002 | 1.2 | 1.21 | 003 | x | |
| MM4 | LAC network (Compex) | 002 | 1.5 | 1.4 | 005 | x | |
| PROFIBUS | DP :    master | --- | --- | --- | --- | --- | not implemented |
| | slave | --- | --- | --- | --- | --- | not implemented |
| | FMS :  only with PCD7.F700 | --- | --- | --- | --- | --- | not implemented |
| | all indirect instructions | --- | --- | --- | --- | --- | not implemented |
| | new functions | --- | --- | --- | --- | --- | not implemented |
| | FMS +  (GA profile) | --- | --- | --- | --- | --- | not implemented |
| **4.** | **General** | | | | | | |
| Download | Improvement of the procedure | --- | --- | --- | --- | --- | not implemented |
| EEPROM | Configuration memory | --- | --- | --- | --- | --- | not implemented |
| Error Flag | New Error Flag concept | N/A | N/A | N/A | 00A | x | partially only |
| Flash | User program :    Up to 1 MBit | --- | --- | --- | --- | --- | not implemented in the |
| EPROM | Up to 4 MBit | --- | --- | --- | --- | --- | public memory R2/R6 |
| Graftec | 2'000 steps and transitions | 002 | 1.5 | 1.21 | 005 | x | |
| | RSB instruction corrected | 002 | 1.5 | 1.21 | 006 | x | > 25 sequential blocks |
| | RSB instruction corrected | 002 | 1.5 | 1.21 | 009 | x | if step call do not exist |
| History | Improvement of the History list | 002 | 1.5 | 1.21 | 005 | x | more diagnostic info. |
| Interrupt | XOB 20 and XOB 25 | --- | --- | --- | --- | --- | not implemented |
| Password | | 003 | 1.9 | 1.3 | 009 | x | |
| RTC | Calculation of nb. of week/day | N/A | N/A | N/A | 00A | x | independent of WTIME |
| Startup | New Startup routine | N/A | N/A | N/A | 00A | x | compatibility with M300 |
| User progr. | Up to 1 MByte (8x1 MBit) | 003 | 1.7 | 1.21 | 007 | C | RAM/EPROM => R6.. |
| XOB | Priority Mechanism (4 levels) | N/A | N/A | N/A | 009 | x | level 4 is the highest |
| XOB 7 | System Overload for XOB's | --- | --- | --- | --- | --- | not implemented |
| XOB 14/15 | see instruction SYSWR | --- | --- | --- | --- | --- | not implemented |

X          not depending of the hardware version.
N/A       not applicable : version number is not relevant for this feature.
1.          used always the latest firmware version of the PCD8.P100 (V003 - September 1996).
2.          used always the latest firmware version of the PCD8.P800 (V004 - June 1993).
3.          PCD8.P800 with firmware V004 is needed to be able to use all S-BUS facilities.
4.          take care at the FW compatibility if you use a PCD6.M1/2 in combination with PCD6.M3 !