

| | <i>number of SDD module (from 0 to A, only even numbers)</i> | | | |
|----------------------------|--|--|-----------------------|-----------------------|
| | FF | FF | FF | 00 |
| CARLOSrx | <i>10xxxxxx</i> | physics_run&am_full&PP &TP&active modules | active modules | load trigger |
| CARLOS | <i>11xxxxxx</i> | <i>address</i> | <i>address</i> | <i>address</i> |
| | TH ch1 | TH ch0 | TL ch1 | TL ch0 |
| | stop if error | enable 2D | anode length ch1 | anode length ch0 |
| | FF | FF | FF | read back |
| AMBRA ch0 x4 | <i>0000xx10</i> | <i>address</i> | <i>address</i> | <i>address</i> |
| | tx address | read counter | write counter | SOP delay |
| | <i>mask an. 24-31</i> | <i>mask an. 16-23</i> | <i>mask an. 8-15</i> | <i>mask an. 0-7</i> |
| | <i>mask an. 56-63</i> | <i>mask an. 48-55</i> | <i>mask an. 40-47</i> | <i>mask an. 32-39</i> |
| | FF | FF | baseline present | read back |
| | <i>baseline 3</i> | <i>baseline 2</i> | <i>baseline 1</i> | <i>baseline 0</i> |
| | ... | ... | ... | ... |
| | <i>baseline 63</i> | <i>baseline 62</i> | <i>baseline 61</i> | <i>baseline 60</i> |
| PASCAL ch0 x4 | <i>0000xx00</i> | <i>address</i> | <i>address</i> | <i>address</i> |
| | calibration DAC | | VREF control DAC | |
| | ADC full | AM full | gain control | sel cal channels |
| | FF | FF | FF | read back |
| AMBRA ch1 x4 | <i>0010xx10</i> | <i>address</i> | <i>address</i> | <i>address</i> |
| | tx address | read counter | write counter | SOP delay |
| | <i>mask an. 24-31</i> | <i>mask an. 16-23</i> | <i>mask an. 8-15</i> | <i>mask an. 0-7</i> |
| | <i>mask an. 56-63</i> | <i>mask an. 48-55</i> | <i>mask an. 40-47</i> | <i>mask an. 32-39</i> |
| | FF | FF | baseline present | read back |
| | <i>baseline 3</i> | <i>baseline 2</i> | <i>baseline 1</i> | <i>baseline 0</i> |
| | ... | ... | ... | ... |
| | <i>baseline 63</i> | <i>baseline 62</i> | <i>baseline 61</i> | <i>baseline 60</i> |
| PASCAL ch1 x4 | <i>0010xx00</i> | <i>address</i> | <i>address</i> | <i>address</i> |
| | calibration DAC | | VREF control DAC | |
| | ADC full | AM full | gain control | sel cal channels |
| | FF | FF | FF | read back |
| | FF | FF | FF | 11 |
| parametri per il modulo | ... | ... | ... | ... |
| successivo | ... | ... | ... | ... |
| | ... | ... | ... | ... |
| | ... | ... | ... | ... |
| | FF | FF | FF | FF |

Numero di risposte JTAG attese per ogni modulo: 4328

Numero di risposte JTAG attese per ogni modulo (con baseline eq): 12520

Notes:

- For stopiferror and enable 2D the following encoding has been used:
 - 0 → 00000000
 - 1 → 01111111
- For ADC full and AM full the following encoding has been chosen:
 - 11111111 → full frequency
 - 00000000 → half frequency
- tx_addr:
 - tx_addr is only written during individual addressing
 - only the 2 LSBs are meaningful for tx_addr.

The baseline values are 6-bit numbers. Only the 6 LSBs are taken into account.