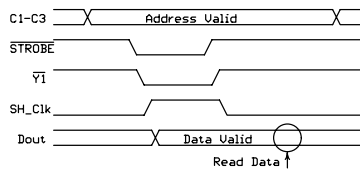
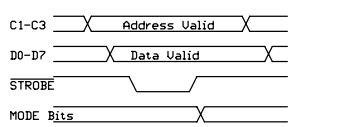


## PRN-Port Data Exchange Protocol

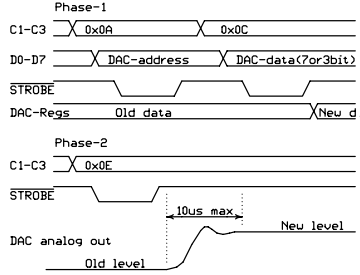
### Clock to CASTOR



### CASTOR Mode Set



### Set Treshold (DAC)

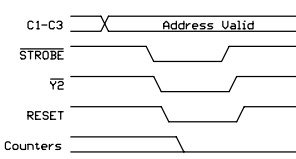


### Address Table

	C3	C2	C1	C0	Hex
MODE register	0	0	0	0	0x00
SH_CLK	0	0	1	0	0x02
RESET Counters	0	1	0	0	0x04
Auxiliary-2	0	1	1	0	0x06
Auxiliary-3	1	0	0	0	0x08
DAC Address Latch	1	0	1	0	0x0A
DAC Write or Clear	1	1	0	0	0x0C
DAC Update Latch	1	1	1	0	0x0E

Note: STROBE bit C0 is inverted on the connector.  
 To generate the STROBE pulse use :  
 1) Write the address to PRN\_CTRL\_REG  
 2) Add 1 to address and write again  
 3) Write again the original address

### Reset CASTOR



### Data Bit-Map Table

Register	Bit(s)	Function	Value
MODE	0	Enable	1
	1	SI_Ext-1	1
	2	SI_Ext-2	1
	3	Aux-1	x
	4	(Aux-2) -> Depends on (Aux-3) -> J2 and J3	x
	5		x
	6		x
SH_Clk	---	Shift out data and read	---
RESET	---	Reset counters	---
Aux-2	---	Auxiliary	---
Aux-3	---	Auxiliary	---
DAC-Address	all	DAC WR address and DAC register address for discriminator threshold voltage	00-07 to 70-77
DAC WRn/CLR	0-7 or 0-3	DAC register data for discriminator threshold voltage	0x000 to 0x800, 0xFF
LE1234	---	Update all DACs simultaneously	---

**Institut Jožef Stefan, Ljubljana**

projekt/naloga : **CASTOR32 2x8 Cntrol Board**

sestavni del : **PRN-interface**

pripombe : tolerance uporov 1 %  
 tolerance kondenzatorjev 20 %

načrtoval : E. Margan  
 risal : E. Margan  
 datum : 1999.02.11  
 list : 1/2  
 koda : F910-VJ-X1