

Protocol of MiniDS <=> PC communication

Select Clock

Sel Clock

CLK

1 0

0 0 PC via /CLK

0 1 0,2 MHz

1 0 2,0 MHz

1 1 20,0 MHz

Pin	Name	Bit	Offset
2	SelCLK0	0	00H
3	SelCLK1	1	00H
15	D0	3	01H
13	D1	4	01H
12	D2	5	01H
10	D3	6	01H
11	/Ready	7	01H
1	SelRange	0	02H
14	/CLK	1	02H
16	CLR	2	02H
17	SelNibble	3	02H

Sample Block Cycle Using MiniDS Own Clock Source

1. Select Clock
2. Set CLR
3. Clear CLR
4. Set /CLK
5. Clear /CLK
6. Wait for /Ready = 1
7. Set SelCLK to PC clock (00)

FOR Bytes

8. Clear SelNibble
9. LowerNibble = Read from Offset 01H
10. LowerNibble = LowerNibbler AND 078H
11. Shift Right LowerNibble 3
12. Set SelNibble
13. HigherNibble = Read from Offset 01H
14. HigherNibble = HigherNibbler AND 078H
15. Shift Left HigherNibble 1
16. SampleValue = HigherNibble OR LowerNibble
17. Set /CLK
18. Clear /CLK

NEXT Byte

Sample Block Cycle Using The PC For Clock Source

1. Set SelCLK to PC clock (00)
2. Set CLR
3. Clear CLR
4. Set /CLK
5. Clear /CLK

FOR Bytes

8. Clear SelNibble
9. LowerNibble = Read from Offset 01H
10. LowerNibble = LowerNibbler AND 078H
11. Shift Right LowerNibble 3
12. Set SelNibble
13. HigherNibble = Read from Offset 01H
14. HigherNibble = HigherNibbler AND 078H
15. Shift Left HigherNibble 1
16. SampleValue = HigherNibble OR LowerNibble
17. Set /CLK
18. Clear /CLK

NEXT Byte

Disclaimer: No warranty at all!

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