|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| DB[0] | router bits | | | | **DAC address**  00=A  01=B  10=C  11=D | | **ADC address**  00=None  01=IN0  10=IN1  11=BOTH | |
| DB[1] | DATA BYTE 1 (start 1)  Two’s complement coding for AD5764 | | | | | | | |
| DB[2] | DATA BYTE 2 (start 2 )  Two’s complement coding for AD5764 | | | | | | | |
| DB[3] | DATA BYTE 3 (stop 1)  Two’s complement coding for AD5764 | | | | | | | |
| DB[4] | DATA BYTE 4 (stop 2)  Two’s complement coding for AD5764 | | | | | | | |
| DB[5] | Nsteps  Number of data points in an autoramp | | | | | | | |
| DB[6] | Reserved for Delay  Delay time in units tbd. NOT IMPLEMENTED | | | | | | | |

* DB[0]
  + Router bits
    - READ ADC 0000 0
    - WRITE DAC 0001 1
    - AUTORAMP 0010 2
    - Reset ADC 0011 3
    - TALK ADC 0100 4 Writes DATA BYTE 1,sends result back
    - Write ADC CT 0101 5 Writes ADC conversion time register
    - Read DAC
  + DAC ADDRESS
    - DAC A 00 0
    - DAC B 01 1
    - DAC C 10 2
    - DAC D 11 3
  + ADC ADDRESS
    - NO READ 00 0 RETURNS NOTHING
    - ADC 0 01 1 RETURNS 2 BYTES
    - ADC 1 10 2 RETURSN 2 BYTES
    - ADC 0&1 11 3 RETURNS 4 BYTES