Jim,

Thank you for your help. That would be very useful.

DAC sample rate is 9GHz

Use PLL, reference clock frequency is 450MHz, N=1, M=5

Real data input

Interpolation factor is 4X

LMFS is 8212

RBD is 19

K is 20

SYSREF frequency is 28.125MHz

Table1 is my register setting and configuration of sequence. I also make register setting TXT file, It may be more convenient for you to use.

Regards,

tang

Table1:

|  |  |  |
| --- | --- | --- |
| Pull txenable low | | |
| Provide differential clock input | | |
| Toggle RESETB pin low then high | | |
| Read SPI Page0, Register 0x7F Bits[15:10]=100000b | | |
| Address | Data | Remarks |
| Page0 | Page0 | Page0 |
| 0x00 | 0x5800 |  |
| 0x01 | 0x1880 |  |
| 0x02 | 0x00FF |  |
| 0x03 | 0x00FF |  |
| 0x04 | 0x0000 |  |
| 0x05 | 0x0000 |  |
|  |  |  |
| Page1 | Page1 | Page1(DAC0) |
| 0x09 | 0x0001 | Page1 |
| 0x0A | 0x0210 | Interpolation 4X |
| 0x0C | 0x2402 |  |
| 0x0D | 0x0000 |  |
| 0x0E | 0x00FF |  |
| 0x0F | 0xFFFF |  |
| 0x10 | 0xFFFF |  |
| 0x11 | 0xFFFF |  |
| 0x17 | 0x0000 |  |
| 0x19 | 0x0001 |  |
| 0x1C | 0x0000 |  |
| 0x1D | 0x0000 |  |
| 0x1E | 0x0000 |  |
| 0x1F | 0x0000 |  |
| 0x20 | 0x0000 |  |
| 0x21 | 0x0000 |  |
| 0x22 | 0x0000 |  |
| 0x23 | 0x0000 |  |
| 0x24 | 0x0030 |  |
| 0x25 | 0x3200 |  |
| 0x27 | 0x8888 |  |
| 0x28 | 0x0330 |  |
| 0x29 | 0x0000 |  |
| 0x2A | 0x0000 |  |
| 0x2B | 0x0000 |  |
| 0x2C | 0x0000 |  |
| 0x2D | 0x1FFF |  |
| 0x2E | 0x1FFF |  |
| 0x2F | 0x0000 |  |
| 0x30 | 0x0000 |  |
| 0x32 | 0x0400 |  |
| 0x33 | 0x0400 |  |
| 0x46 | 0x0044 |  |
| 0x47 | 0x190A |  |
| 0x48 | 0x31C3 |  |
| 0x4A | 0x0F03 |  |
| 0x4B | 0x1300 | RBD=19, F=1 |
| 0x4C | 0x1303 | K=20, L=4 |
| 0x4D | 0x0001 | M=1, S=2 |
| 0x4E | 0x0F4F | NP=16, HD=1,SCR=0, N-16 |
| 0x4F | 0x1C60 |  |
| 0x50 | 0x0000 |  |
| 0x51 | 0x001F |  |
| 0x52 | 0x00FF |  |
| 0x53 | 0x0100 |  |
| 0x54 | 0x8E60 |  |
| 0x5C | 0x0003 |  |
| 0x5F | 0x0123 |  |
| 0x60 | 0x4567 |  |
| 0x64 | 0x0000 |  |
| 0x65 | 0x0000 |  |
| 0x66 | 0x0000 |  |
| 0x67 | 0x0000 |  |
| 0x68 | 0x0000 |  |
| 0x69 | 0x0000 |  |
| 0x6A | 0x0000 |  |
| 0x6B | 0x0000 |  |
| 0x6C | 0x0000 |  |
| 0x6D | 0x0000 |  |
| 0x6E | 0x0000 |  |
|  |  |  |
| Page2 | Page2 | Page2(DAC1) |
| 0x09 | 0x0002 | Page2 |
| 0x0A | 0x0210 | Interpolation 4X |
| 0x0C | 0x2402 |  |
| 0x0D | 0x0000 |  |
| 0x0E | 0x00FF |  |
| 0x0F | 0xFFFF |  |
| 0x10 | 0xFFFF |  |
| 0x11 | 0xFFFF |  |
| 0x17 | 0x0000 |  |
| 0x19 | 0x0001 |  |
| 0x1C | 0x0000 |  |
| 0x1D | 0x0000 |  |
| 0x1E | 0x0000 |  |
| 0x1F | 0x0000 |  |
| 0x20 | 0x0000 |  |
| 0x21 | 0x0000 |  |
| 0x22 | 0x0000 |  |
| 0x23 | 0x0000 |  |
| 0x24 | 0x0030 |  |
| 0x25 | 0x3200 |  |
| 0x27 | 0x8888 |  |
| 0x28 | 0x0330 |  |
| 0x29 | 0x0000 |  |
| 0x2A | 0x0000 |  |
| 0x2B | 0x0000 |  |
| 0x2C | 0x0000 |  |
| 0x2D | 0x1FFF |  |
| 0x2E | 0x1FFF |  |
| 0x2F | 0x0000 |  |
| 0x30 | 0x0000 |  |
| 0x32 | 0x0400 |  |
| 0x33 | 0x0400 |  |
| 0x46 | 0x0044 |  |
| 0x47 | 0x190A |  |
| 0x48 | 0x31C3 |  |
| 0x4A | 0xF003 |  |
| 0x4B | 0x1300 | RBD=19, F=1 |
| 0x4C | 0x1303 | K=20, L=4 |
| 0x4D | 0x0001 | M=1, S=2 |
| 0x4E | 0x0F4F | NP=16, HD=1,SCR=0, N-16 |
| 0x4F | 0x1C60 |  |
| 0x50 | 0x0000 |  |
| 0x51 | 0x001F |  |
| 0x52 | 0x00FF |  |
| 0x53 | 0x0100 |  |
| 0x54 | 0x8E60 |  |
| 0x5C | 0x0003 |  |
| 0x5F | 0x0123 |  |
| 0x60 | 0x4567 |  |
| 0x64 | 0x0000 |  |
| 0x65 | 0x0000 |  |
| 0x66 | 0x0000 |  |
| 0x67 | 0x0000 |  |
| 0x68 | 0x0000 |  |
| 0x69 | 0x0000 |  |
| 0x6A | 0x0000 |  |
| 0x6B | 0x0000 |  |
| 0x6C | 0x0000 |  |
| 0x6D | 0x0000 |  |
| 0x6E | 0x0000 |  |
|  |  |  |
| Page4 | Page4 | Page4 |
| 0x09 | 0x0004 | Page4 |
| 0x0A | 0xFC03 |  |
| 0x0B | 0x0002 |  |
| 0x0C | 0xA002 |  |
| 0x0D | 0xF000 |  |
| 0x1B | 0x0000 |  |
| 0x23 | 0xFFFF |  |
| 0x24 | 0x1000 |  |
| 0x31 | 0x0400 | N=1 |
| 0x32 | 0x0408 | M=5 |
| 0x33 | 0xC73C |  |
| 0x34 | 0x0000 |  |
| 0x35 | 0x0018 |  |
| 0x3B | 0x9802 |  |
| 0x3C | 0x8029 |  |
| 0x3D | 0x0088 |  |
| 0x3E | 0x0909 |  |
| 0x3F | 0x0000 |  |
|  |  |  |
| Reset | Reset | Reset |
| 0x09 | 0x0003 | Page1 and Page2 |
| 0x24 | 0x0000 |  |
| 0x5C | 0x0000 |  |
| 0x09 | 0x0004 | Page4 |
| 0x0A | 0xFC03 |  |
| Wait 10ms |  |  |
| 0x0A | 0x7C03 |  |
| 0x09 | 0x0000 | Page0 |
| 0x00 | 0x5803 |  |
| 0x09 | 0x0001 | Page1 |
| 0x24 | 0x0030 |  |
| Wait 10ms |  |  |
| 0x09 | 0x0002 | Page2 |
| 0x5C | 0x0003 |  |
| Wait 10ms |  |  |
| 0x09 | 0x0000 | Page0 |
| 0x00 | 0x5800 |  |
| 0x09 | 0x0000 | Page0 |
| 0x04 | 0x0000 |  |
| 0x05 | 0x0000 |  |
| 0x09 | 0x0003 | Page1 and Page2 |
| 0x64 | 0x0000 |  |
| 0x65 | 0x0000 |  |
| 0x66 | 0x0000 |  |
| 0x67 | 0x0000 |  |
| 0x68 | 0x0000 |  |
| 0x69 | 0x0000 |  |
| 0x6A | 0x0000 |  |
| 0x6B | 0x0000 |  |
| 0x6C | 0x0000 |  |
| 0x6D | 0x0000 |  |
| 0x6E | 0x0000 |  |
| Pull txenable high | | |