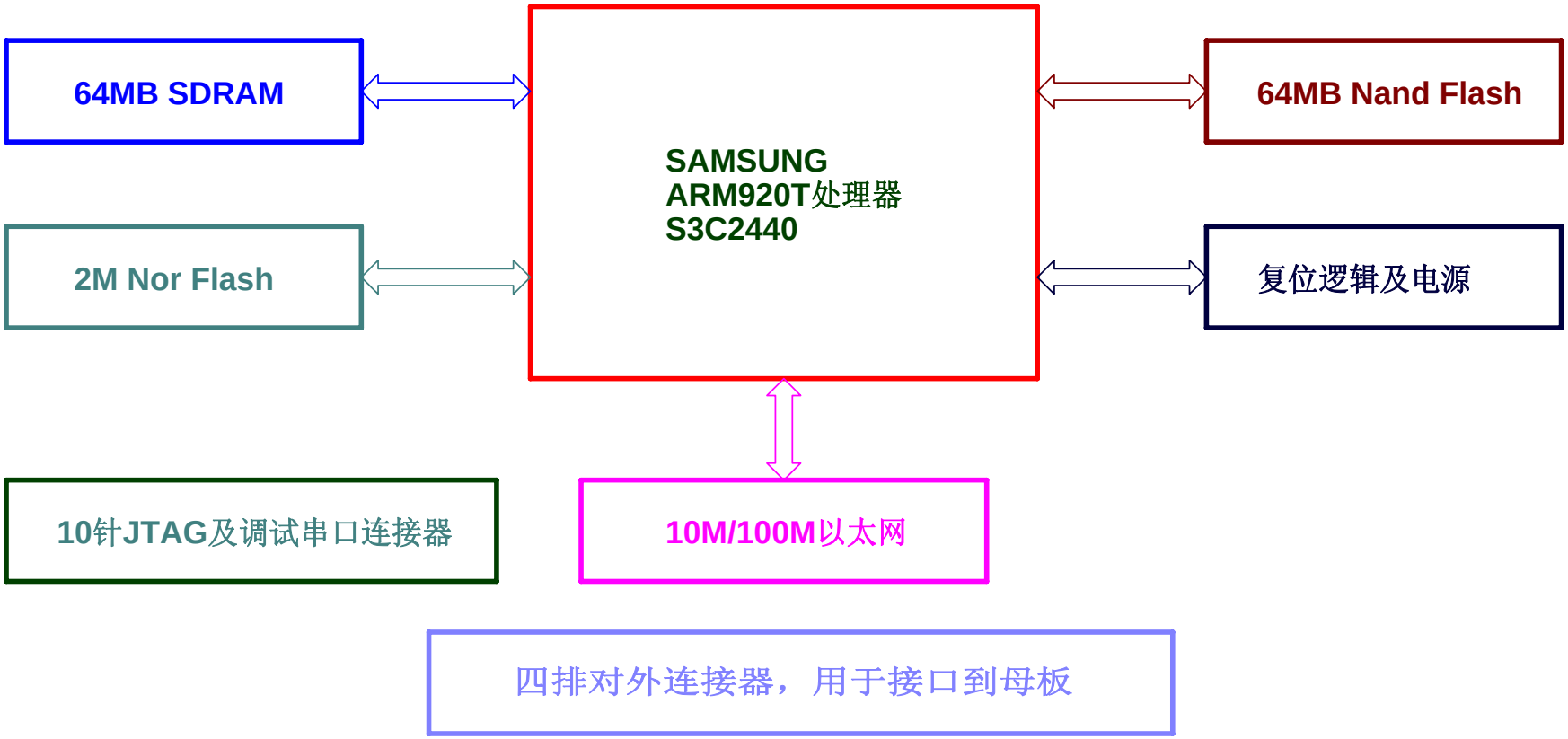
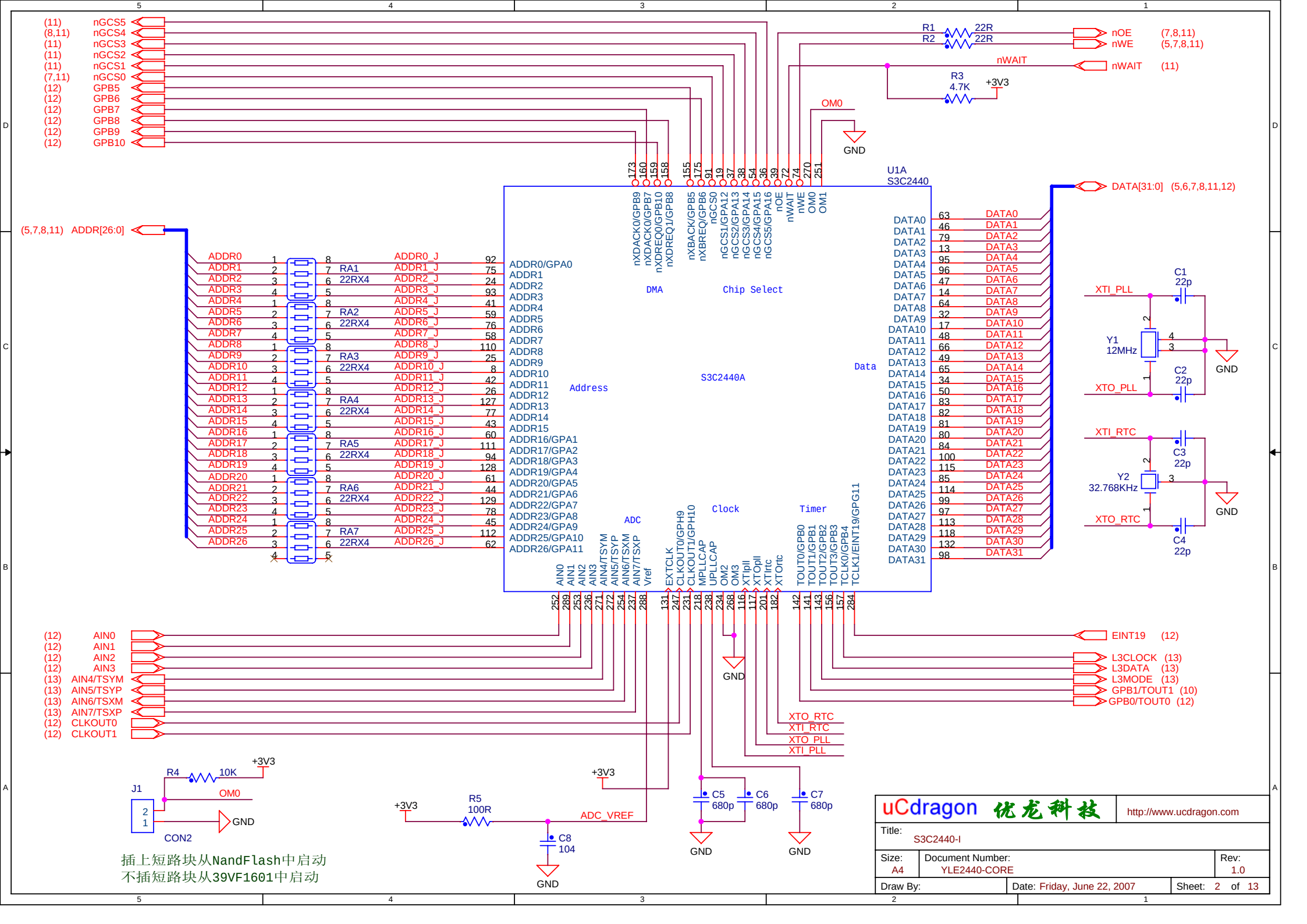
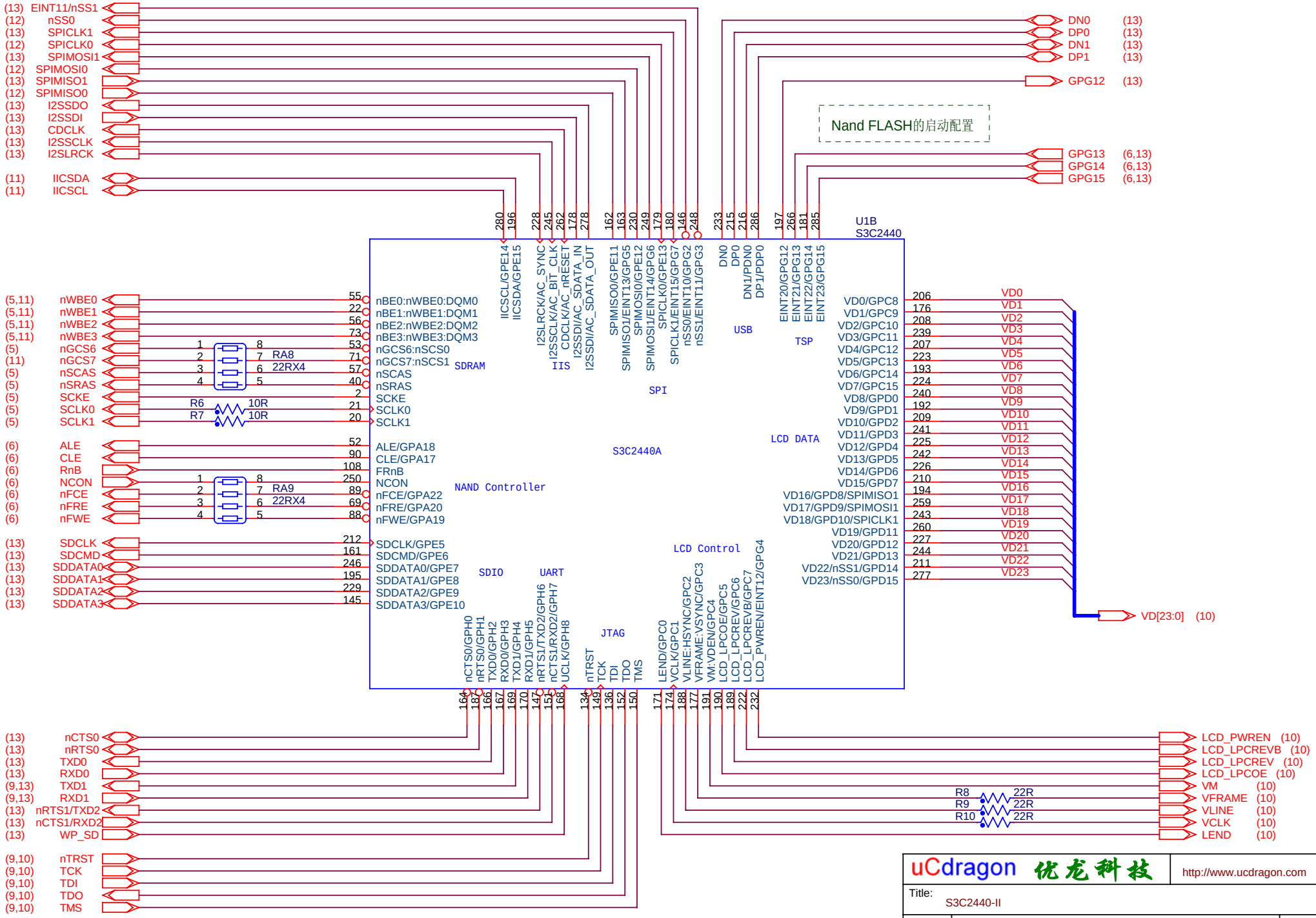
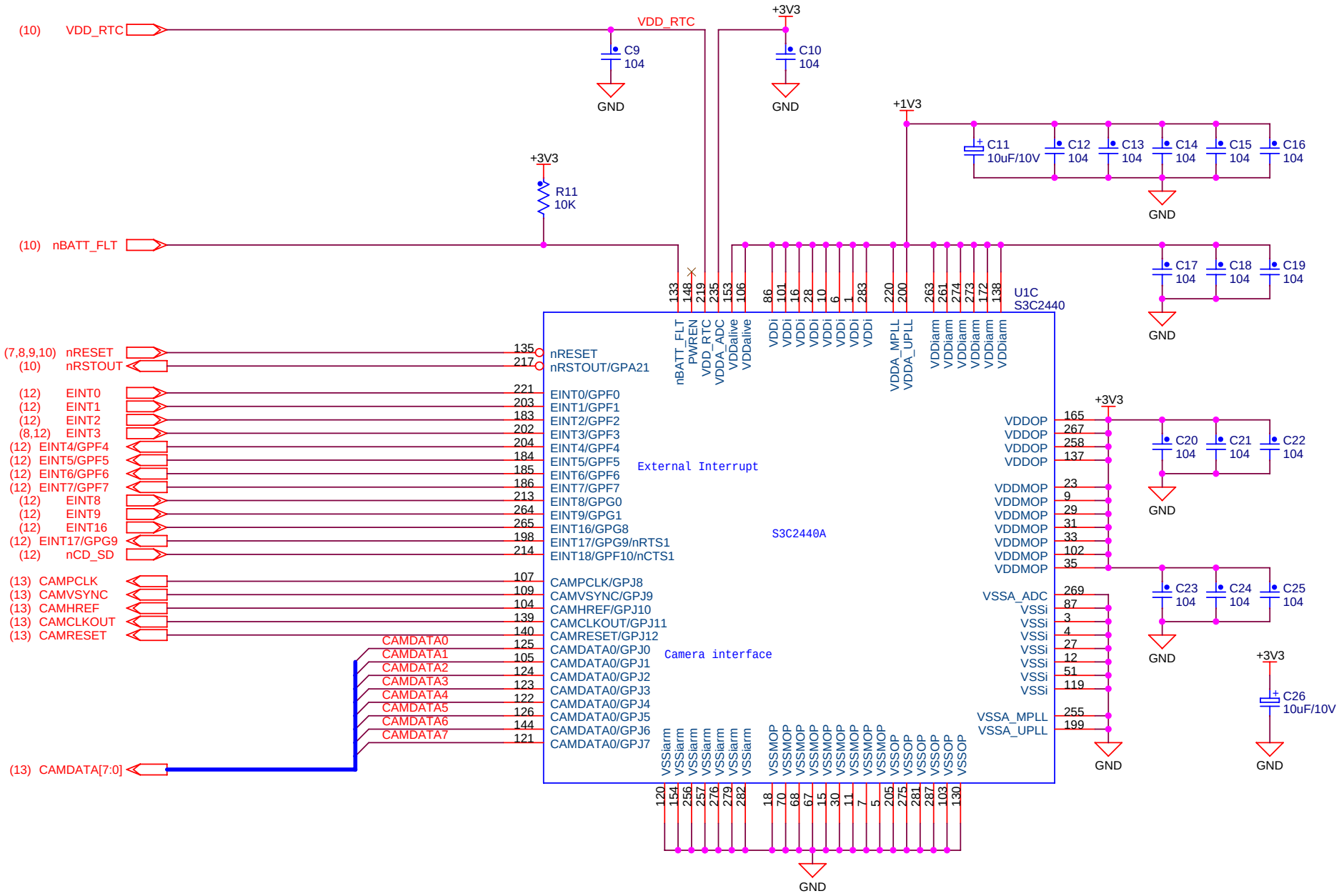
优龙科技YLE2440-CORE-V1.0方框图



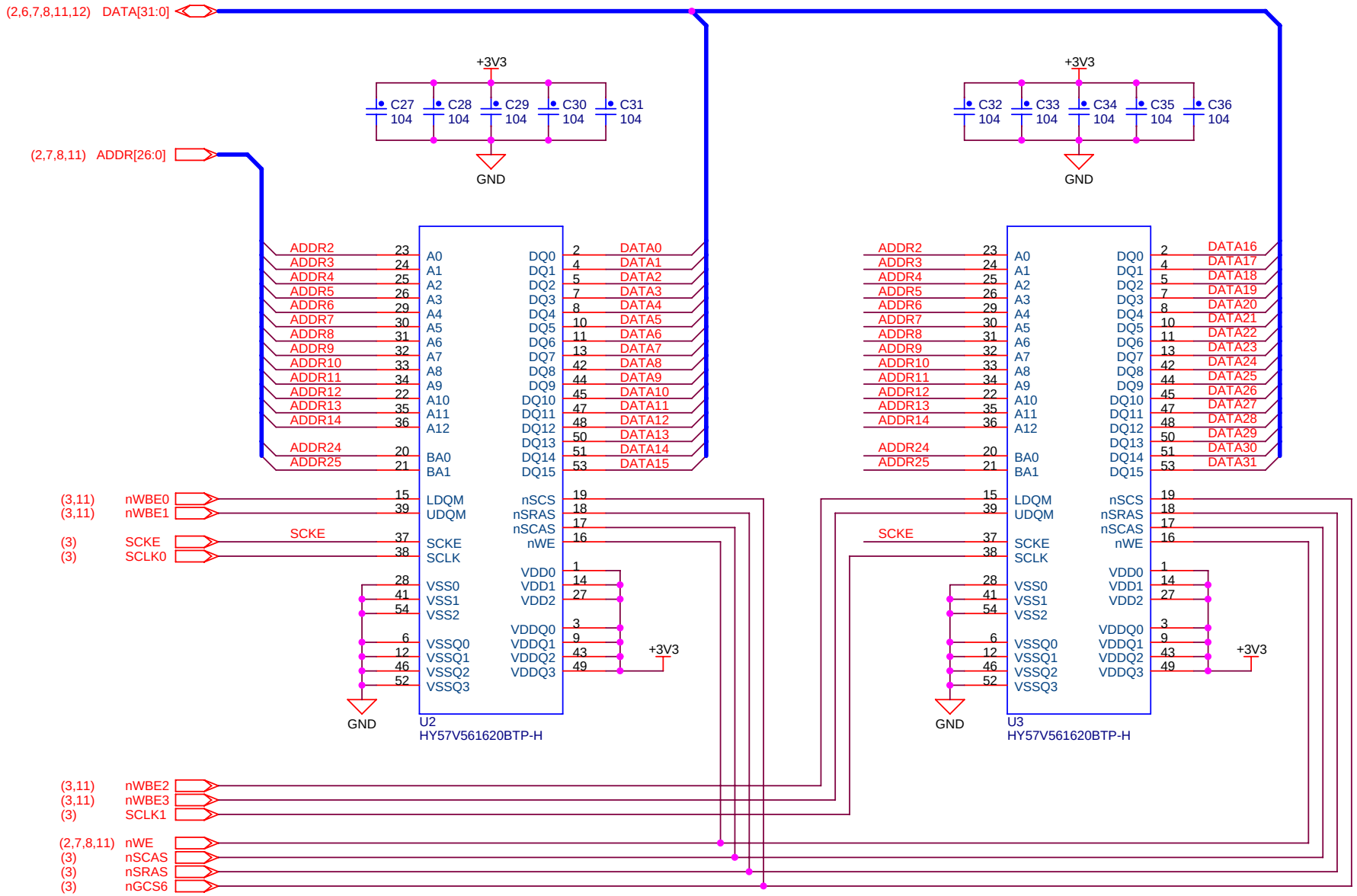
uCdragon 优龙科技		http://www.ucdragon.com
Title: Block Diagram		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 1 of 13


U1A
S3C2440
S3C2440A
Address
Data
DMA
Chip Select
ADC
Clock
Timer
ADDR[26:0]
DATA[31:0] (5,6,7,8,11,12)
nGCS5 (11)
nGCS4 (8,11)
nGCS3 (11)
nGCS2 (11)
nGCS1 (11)
nGCS0 (7,11)
GPB5 (12)
GPB6 (12)
GPB7 (12)
GPB8 (12)
GPB9 (12)
GPB10 (12)
R1 22R
R2 22R
nOE (7,8,11)
nWE (5,7,8,11)
nWAIT
nWAIT (11)
R3 4.7K
+3V3
OM0
GND
RA1 22RX4
RA2 22RX4
RA3 22RX4
RA4 22RX4
RA5 22RX4
RA6 22RX4
RA7 22RX4
C1 22p
C2 22p
C3 22p
C4 22p
Y1 12MHz
Y2 32.768KHz
XTI_PLL
XTO_PLL
XTI_RTC
XTO_RTC
AIN0 (12)
AIN1 (12)
AIN2 (12)
AIN3 (12)
AIN4/TSYM (13)
AIN5/TSYP (13)
AIN6/TSXM (13)
AIN7/TSXP (13)
CLKOUT0 (12)
CLKOUT1 (12)
EINT19 (12)
L3CLOCK (13)
L3DATA (13)
L3MODE (13)
GPB1/TOUT1 (10)
GPB0/TOUT0 (12)
J1
CON2
R4 10K
R5 100R
C5 680p
C6 680p
C7 680p
C8 104
ADC_VREF
插上短路块从NandFlash中启动
不插短路块从39VF1601中启动
uCdragon 优龙科技
http://www.ucdragon.com
Title: S3C2440-I
Size: A4
Document Number: YLE2440-CORE
Rev: 1.0
Draw By:
Date: Friday, June 22, 2007
Sheet: 2 of 13

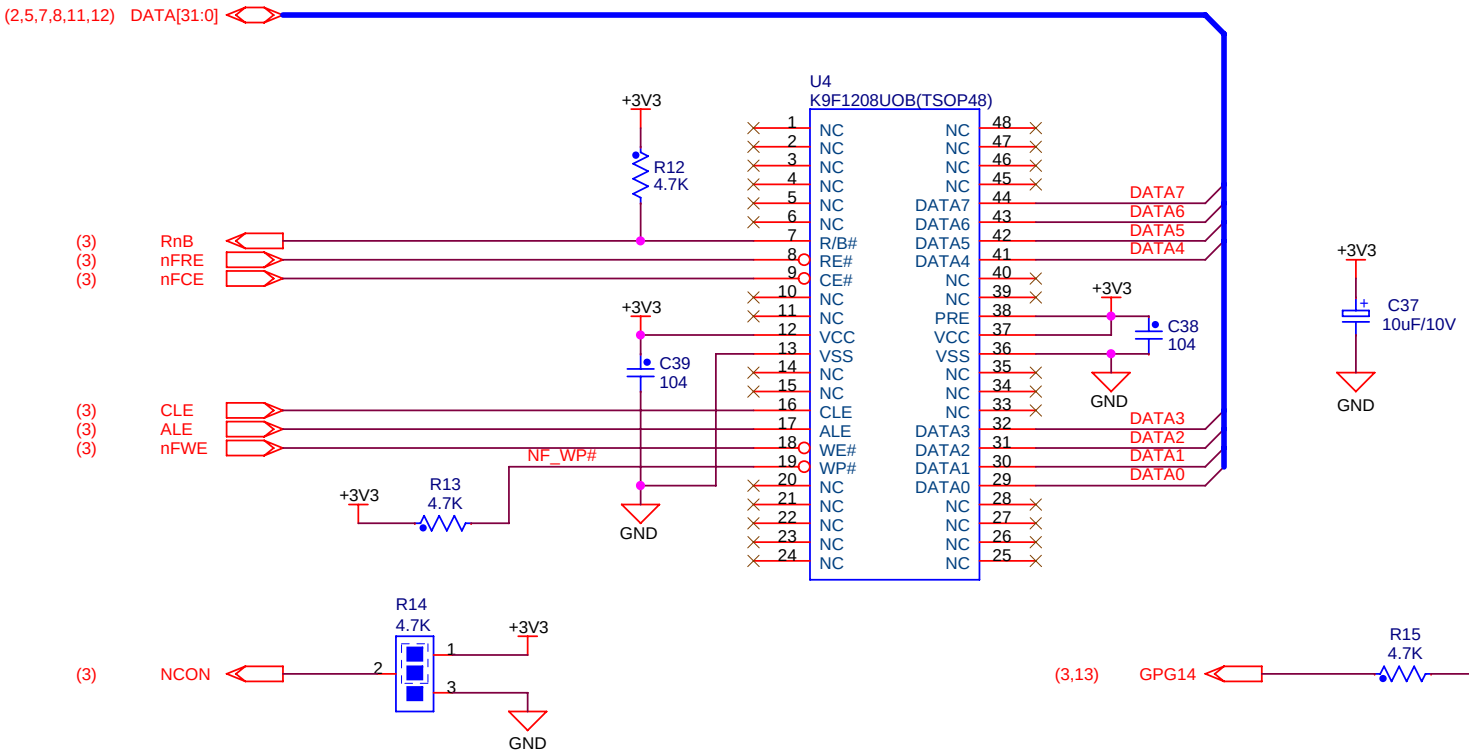

(13) EINT11/nSS1
(12) nSS0
(13) SPICLK1
(12) SPICLK0
(13) SPIMOSI1
(12) SPIMOSI0
(13) SPIMISO1
(12) SPIMISO0
(13) I2SSDO
(13) I2SSDI
(13) CDCLK
(13) I2SSCLK
(13) I2SLRCK
(11) IICSDA
(11) IICSCL
DN0 (13)
DP0 (13)
DN1 (13)
DP1 (13)
GPG12 (13)
Nand FLASH的启动配置
GPG13 (6,13)
GPG14 (6,13)
GPG15 (6,13)
U1B
S3C2440
S3C2440A
SDRAM
IIS
USB
TSP
SPI
LCD DATA
NAND Controller
SDIO
UART
LCD Control
JTAG
nBE0:nWBE0:DQM0
nBE1:nWBE1:DQM1
nBE2:nWBE2:DQM2
nBE3:nWBE3:DQM3
nGCS6:nSCS0
nGCS7:nSCS1
nSCAS
nSRAS
SCKE
SCLK0
SCLK1
ALE/GPA18
CLE/GPA17
FRnB
NCON
nFCE/GPA22
nFRE/GPA20
nFWE/GPA19
SDCLK/GPE5
SDCMD/GPE6
SDDATA0/GPE7
SDDATA1/GPE8
SDDATA2/GPE9
SDDATA3/GPE10
IICSCL/GPE14
IICSDA/GPE15
I2SLRCK/AC_SYNC
I2SSCLK/AC_BIT_CLK
CDCLK/AC_nRESET
I2SSDI/AC_SDATA_IN
I2SSDI/AC_SDATA_OUT
SPIMISO0/GPE11
SPIMISO1/EINT13/GPG5
SPIMOSI0/GPE12
SPIMOSI1/EINT14/GPG6
SPICLK0/GPE13
SPICLK1/EINT15/GPG7
nSS0/EINT10/GPG2
nSS1/EINT11/GPG3
DN0
DP0
DN1/PDN0
DP1/PDP0
EINT20/GPG12
EINT21/GPG13
EINT22/GPG14
EINT23/GPG15
VD0/GPC8
VD1/GPC9
VD2/GPC10
VD3/GPC11
VD4/GPC12
VD5/GPC13
VD6/GPC14
VD7/GPC15
VD8/GPD0
VD9/GPD1
VD10/GPD2
VD11/GPD3
VD12/GPD4
VD13/GPD5
VD14/GPD6
VD15/GPD7
VD16/GPD8/SPIMISO1
VD17/GPD9/SPIMOSI1
VD18/GPD10/SPICLK1
VD19/GPD11
VD20/GPD12
VD21/GPD13
VD22/nSS1/GPD14
VD23/nSS0/GPD15
nCTS0/GPH0
nRTS0/GPH1
TXD0/GPH2
RXD0/GPH3
TXD1/GPH4
RXD1/GPH5
nRTS1/TXD2/GPH6
nCTS1/RXD2/GPH7
UCLK/GPH8
nTRST
TCK
TDI
TDO
TMS
LEND/GPC0
VCLK/GPC1
VLINE:HSYNC/GPC2
VFRAME:VSYNC/GPC3
VM:VDEN/GPC4
LCD_LPCOE/GPC5
LCD_LPCREV/GPC6
LCD_LPCREVB/GPC7
LCD_PWREN/EINT12/GPG4
RA8 22RX4
RA9 22RX4
R6 10R
R7 10R
R8 22R
R9 22R
R10 22R
VD0
VD1
VD2
VD3
VD4
VD5
VD6
VD7
VD8
VD9
VD10
VD11
VD12
VD13
VD14
VD15
VD16
VD17
VD18
VD19
VD20
VD21
VD22
VD23
VD[23:0] (10)
(5,11) nWBE0
(5,11) nWBE1
(5,11) nWBE2
(5,11) nWBE3
(5) nGCS6
(11) nGCS7
(5) nSCAS
(5) nSRAS
(5) SCKE
(5) SCLK0
(5) SCLK1
(6) ALE
(6) CLE
(6) RnB
(6) NCON
(6) nFCE
(6) nFRE
(6) nFWE
(13) SDCLK
(13) SDCMD
(13) SDDATA0
(13) SDDATA1
(13) SDDATA2
(13) SDDATA3
(13) nCTS0
(13) nRTS0
(13) TXD0
(13) RXD0
(9,13) TXD1
(9,13) RXD1
(13) nRTS1/TXD2
(13) nCTS1/RXD2
(13) WP_SD
(9,10) nTRST
(9,10) TCK
(9,10) TDI
(9,10) TDO
(9,10) TMS
LCD_PWREN (10)
LCD_LPCREVB (10)
LCD_LPCREV (10)
LCD_LPCOE (10)
VM (10)
VFRAME (10)
VLINE (10)
VCLK (10)
LEND (10)
uCdragon 优龙科技
http://www.ucdragon.com
Title: S3C2440-II
Size: A4
Document Number: YLE2440-CORE
Rev: 1.0
Draw By:
Date: Friday, June 22, 2007
Sheet: 3 of 13



uCdragon 优龙科技		http://www.ucdragon.com
Title: S3C2440-III		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 4 of 13

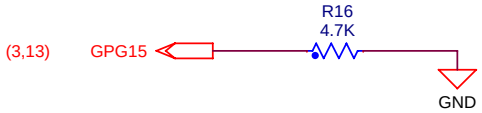


uCdragon 优龙科技		http://www.ucdragon.com
Title: 64MB SDRAM		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 5 of 13



NCON	NAND Flash Configuration
0	256W/512B Per Page , 3/4 Step Addressing
1	1KW/2KB Per Page , 4/5 Step Addressing

GPG14	NAND Flash Configuration
0	3 addr cycle(NCON=0), 4 addr cycle(NCON=1)
1	4 addr cycle(NCON=0), 5 addr cycle(NCON=1)

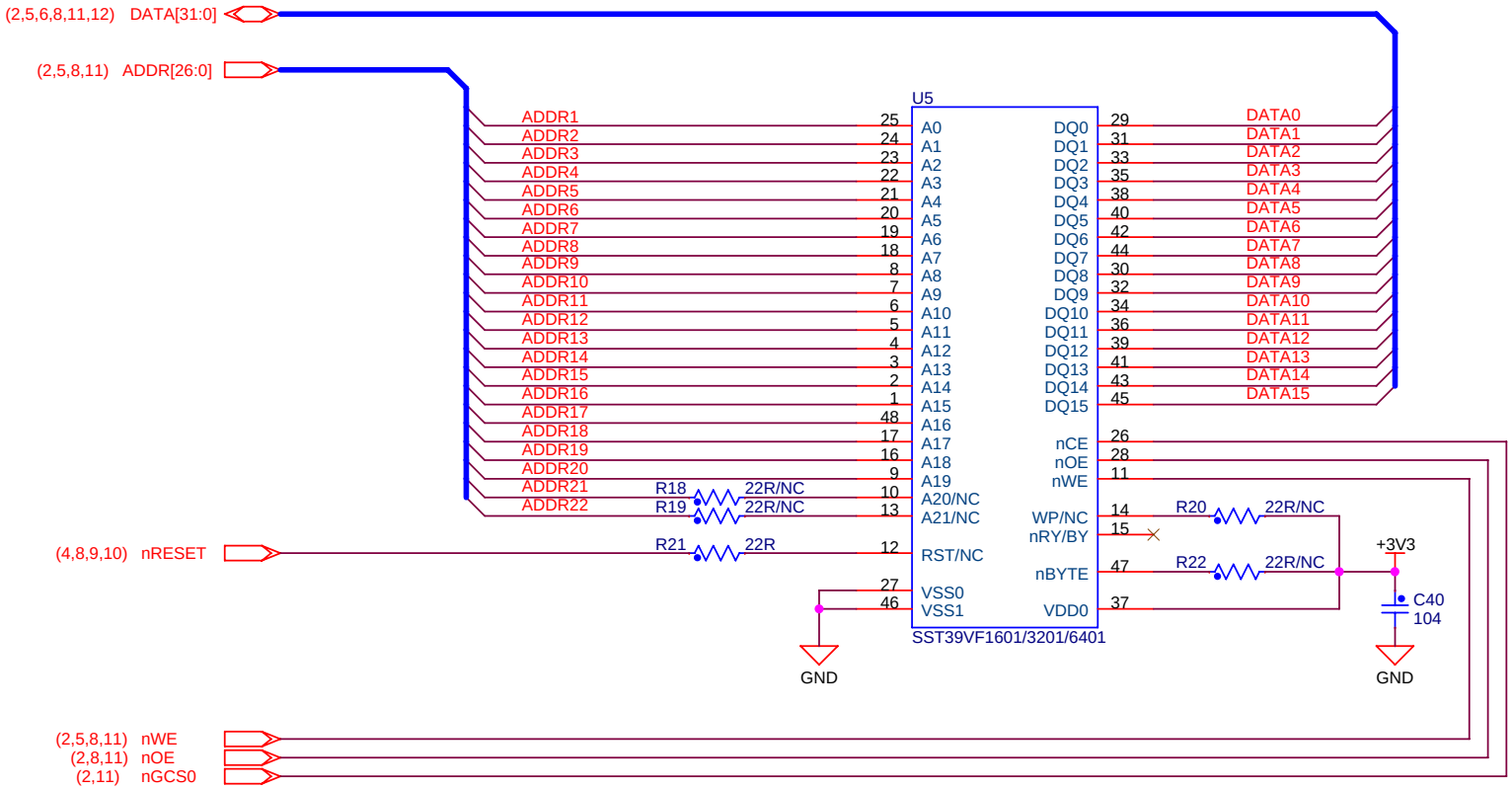


GPG13	NAND Flash Configuration
0	256Words/Page(NCON=0),1KWords/Page(NCON=1)
1	512Bytes/Page(NCON=0),2KBytes/Page(NCON=1)

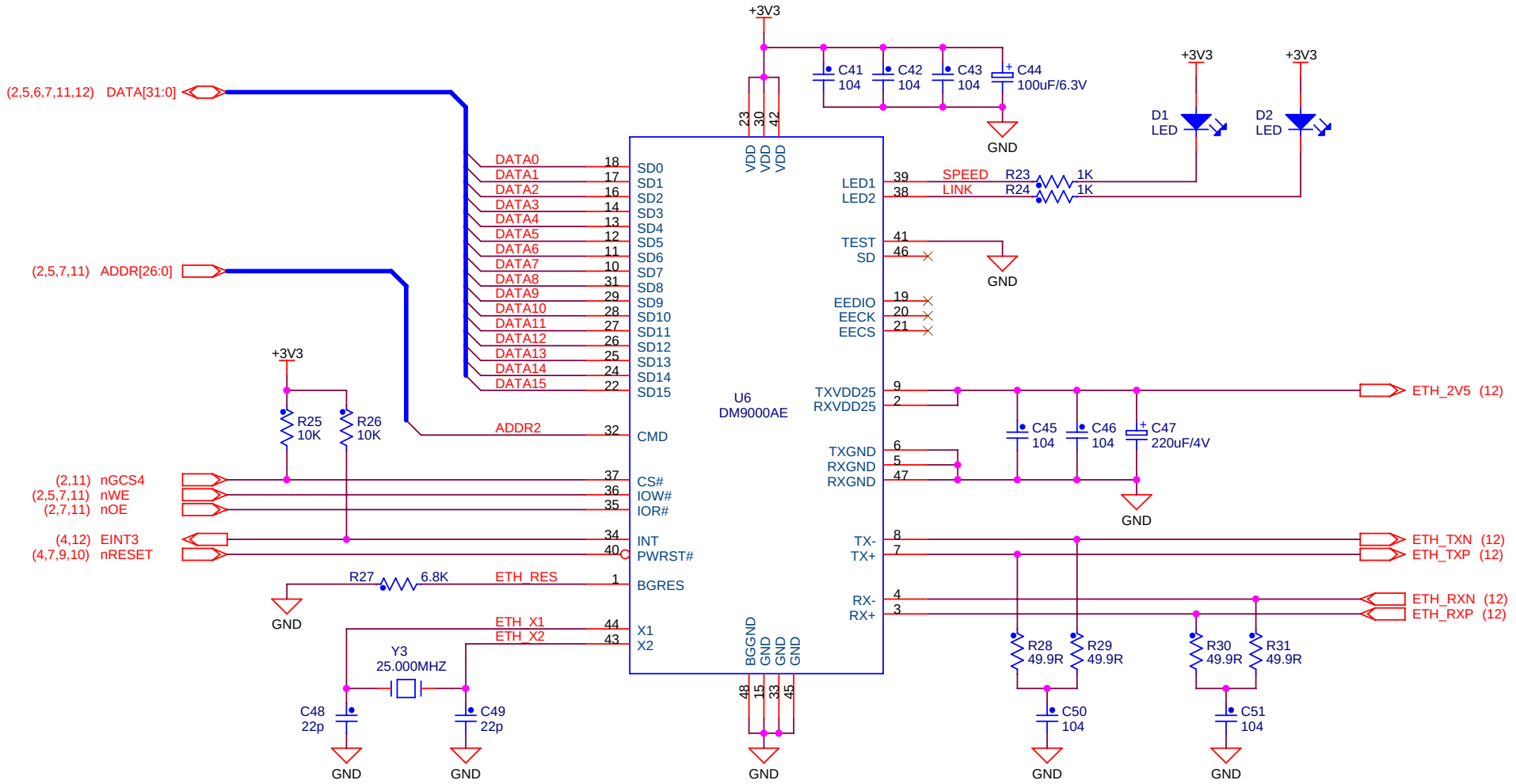
GPG15	NAND Flash Configuration
0	8-bit bus width
1	16-bit bus width

Note: 关于功能选择用电阻，虚线框是默认的焊接位置

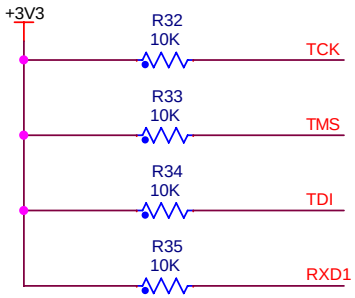
uCdragon 优龙科技		http://www.ucdragon.com
Title: Nand Flash		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 6 of 13

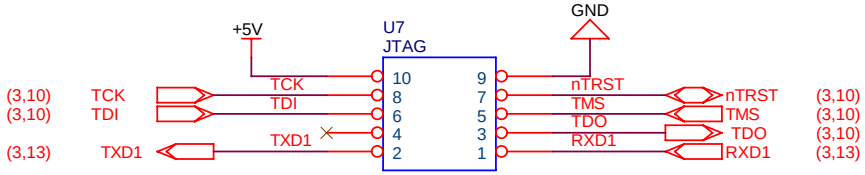


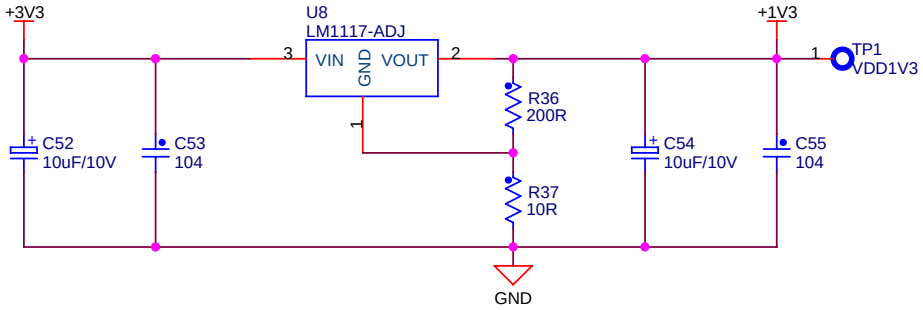
uCdragon 优龙科技		http://www.ucdragon.com
Title: 10M/100M Ethernet		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 7 of 13

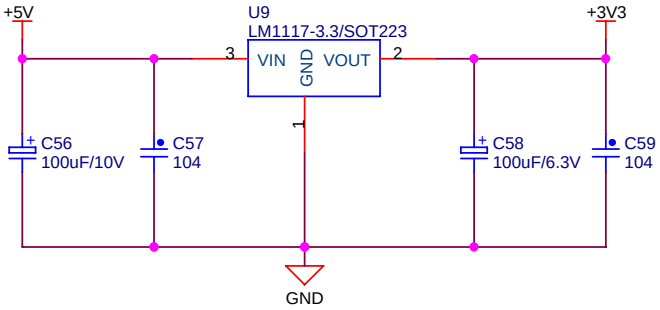


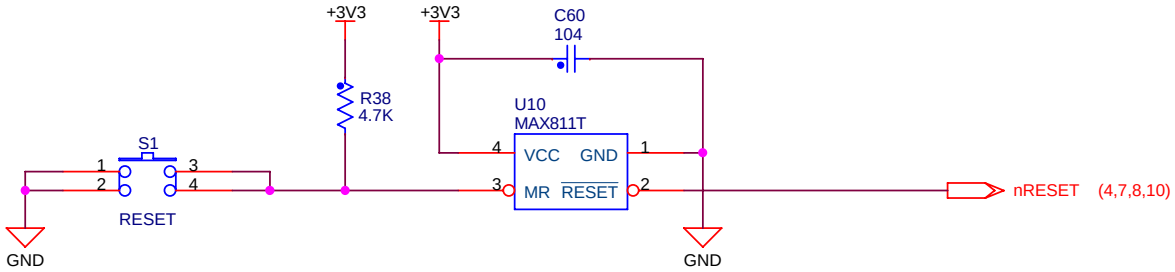
uCdragon 优龙科技		http://www.ucdragon.com
Title: 10M/100M Ethernet		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 8 of 13



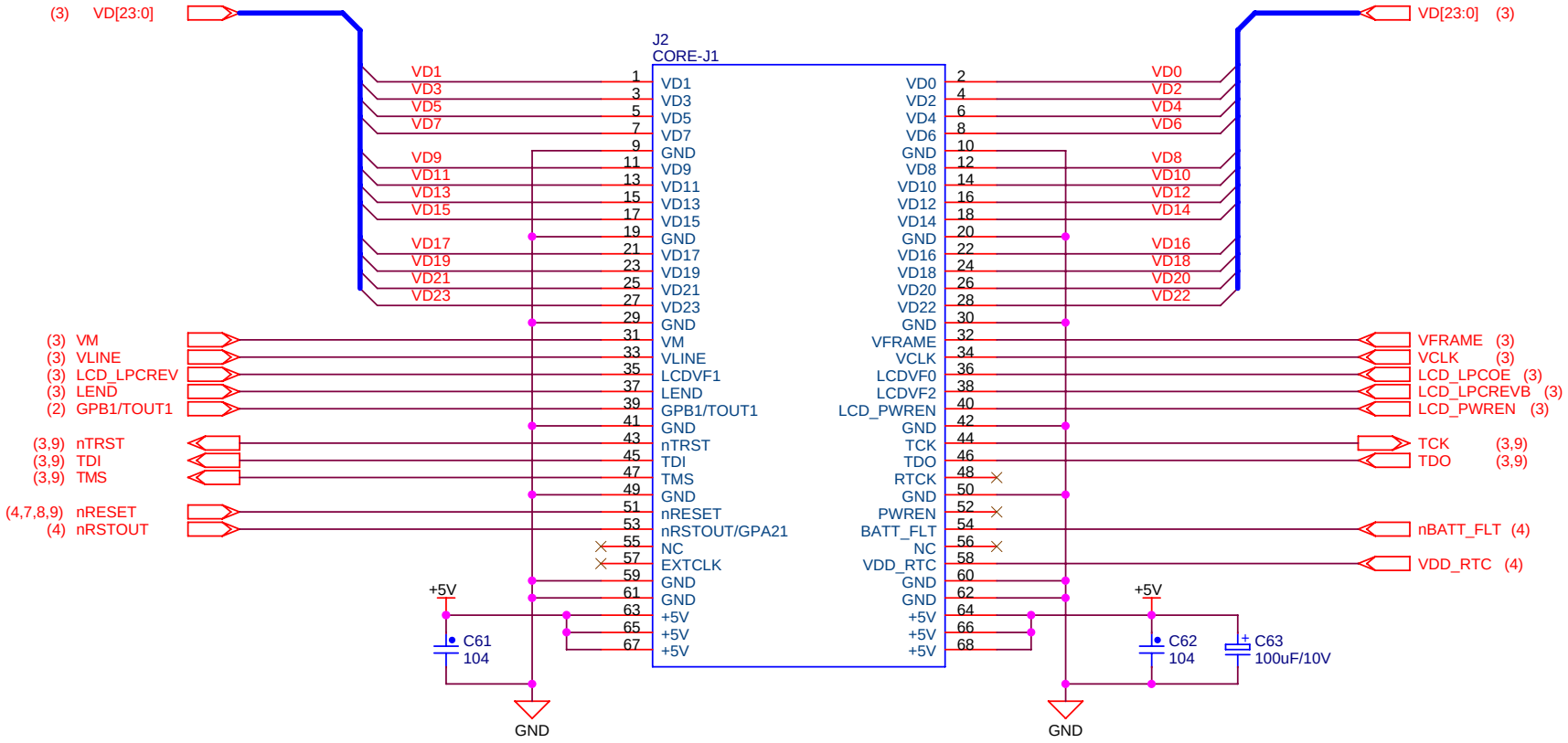




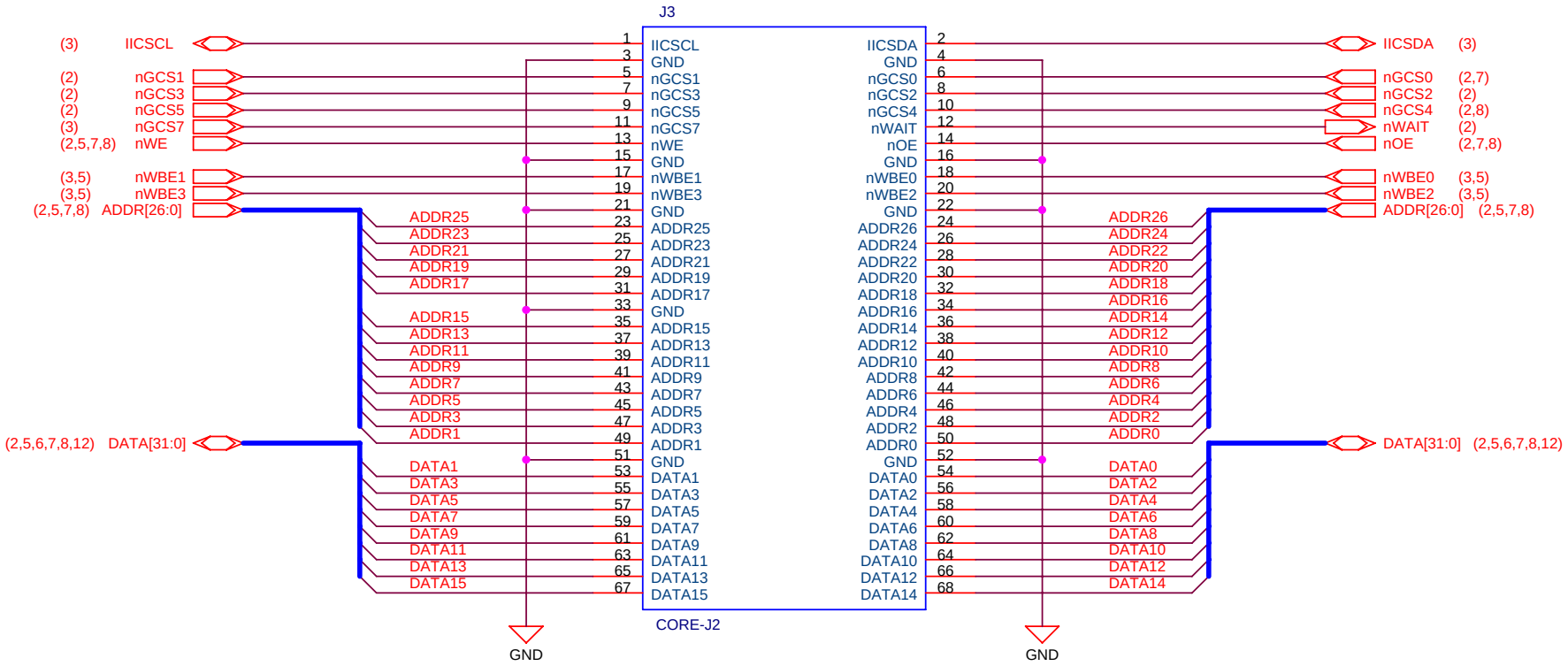




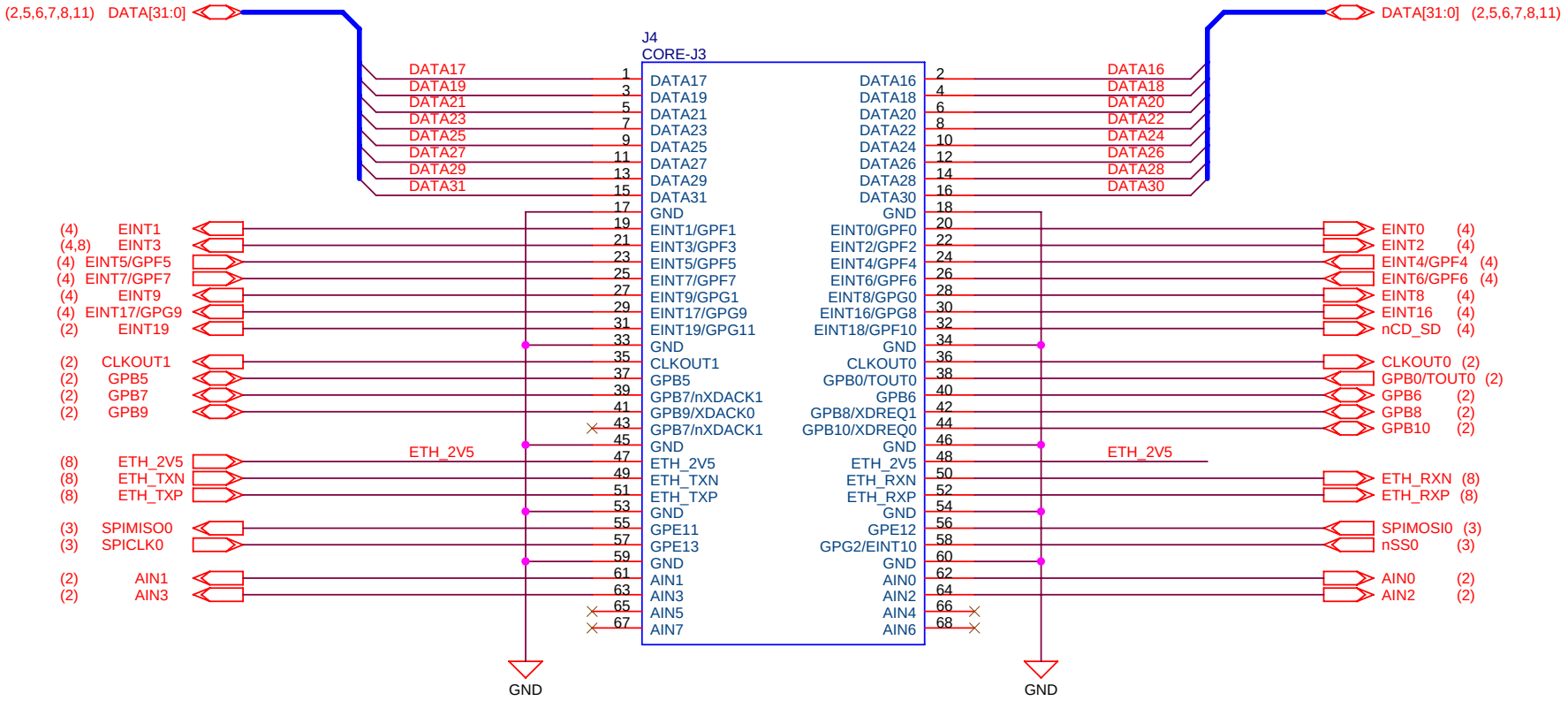
uCdragon 优龙科技		http://www.ucdragon.com
Title: JTAG & POWER & RESET		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 9 of 13



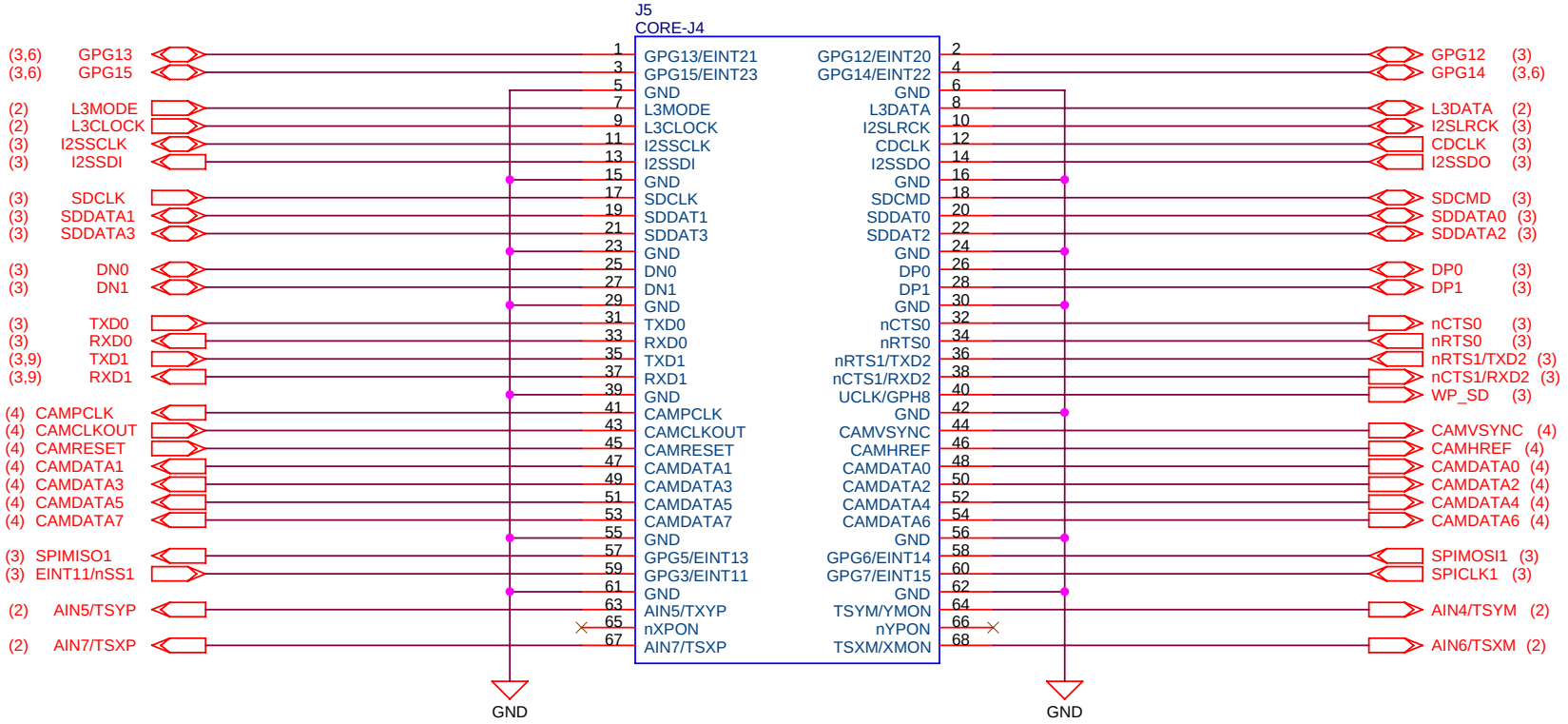
uCdragon 优龙科技		http://www.ucdragon.com
Title: Connector J1		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 10 of 13



uCdragon 优龙科技		http://www.ucdragon.com
Title: Connector J2		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 11 of 13



uCdragon 优龙科技		http://www.ucdragon.com
Title: Connector J3		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 12 of 13



uCdragon 优龙科技		http://www.ucdragon.com
Title: Connector J4		
Size: A4	Document Number: YLE2440-CORE	Rev: 1.0
Draw By:	Date: Friday, June 22, 2007	Sheet: 13 of 13