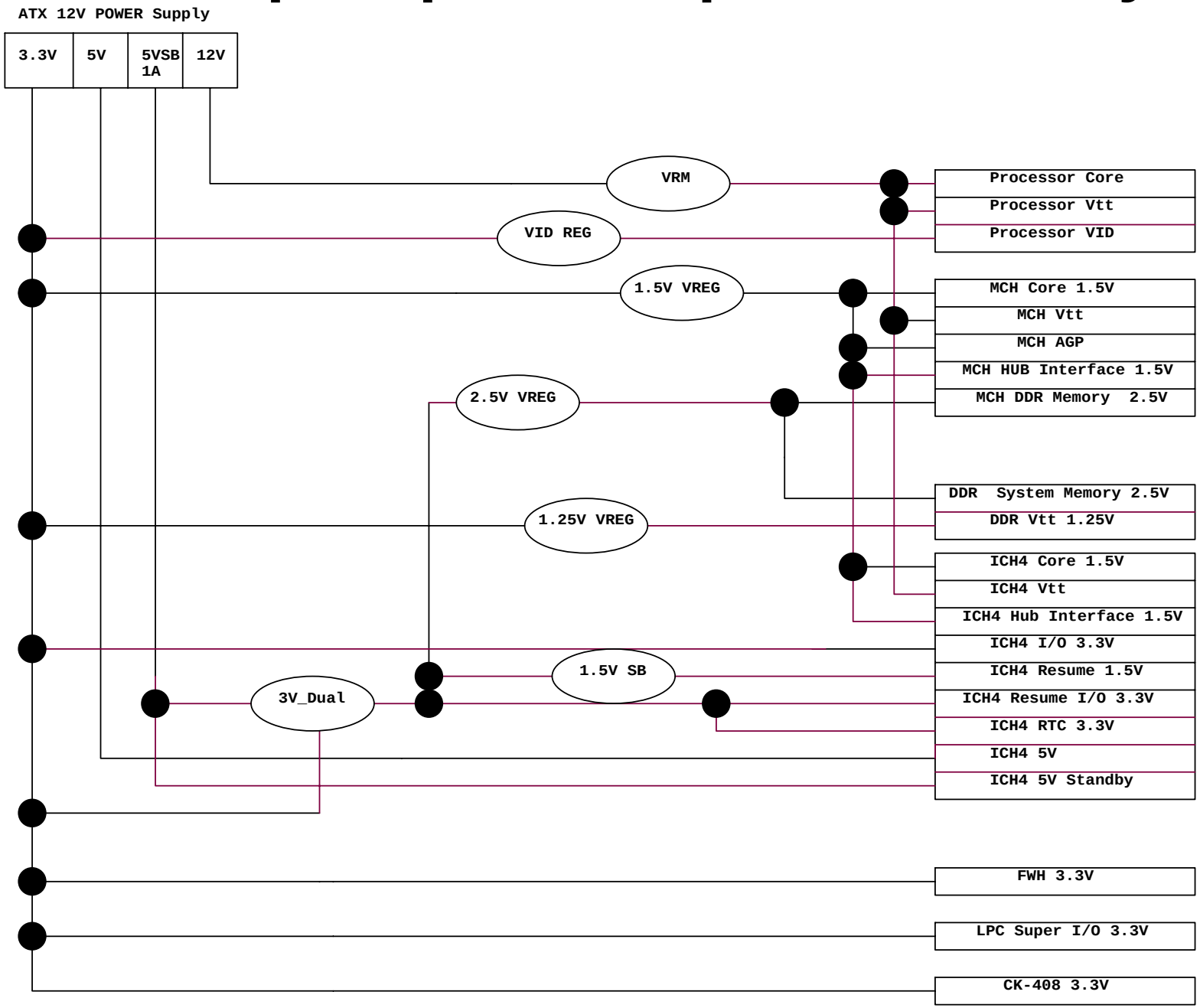
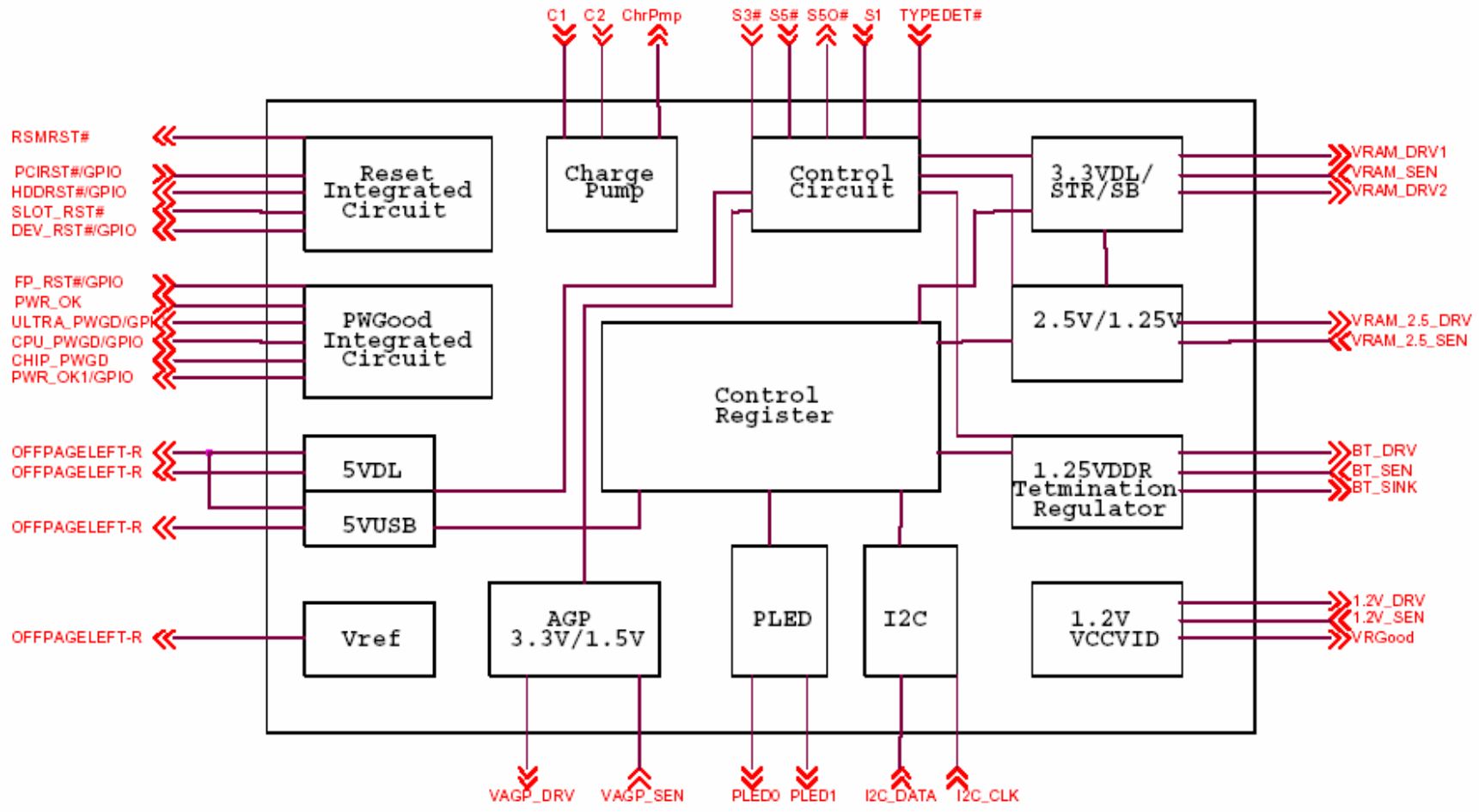
MS-5

ACPI Controller

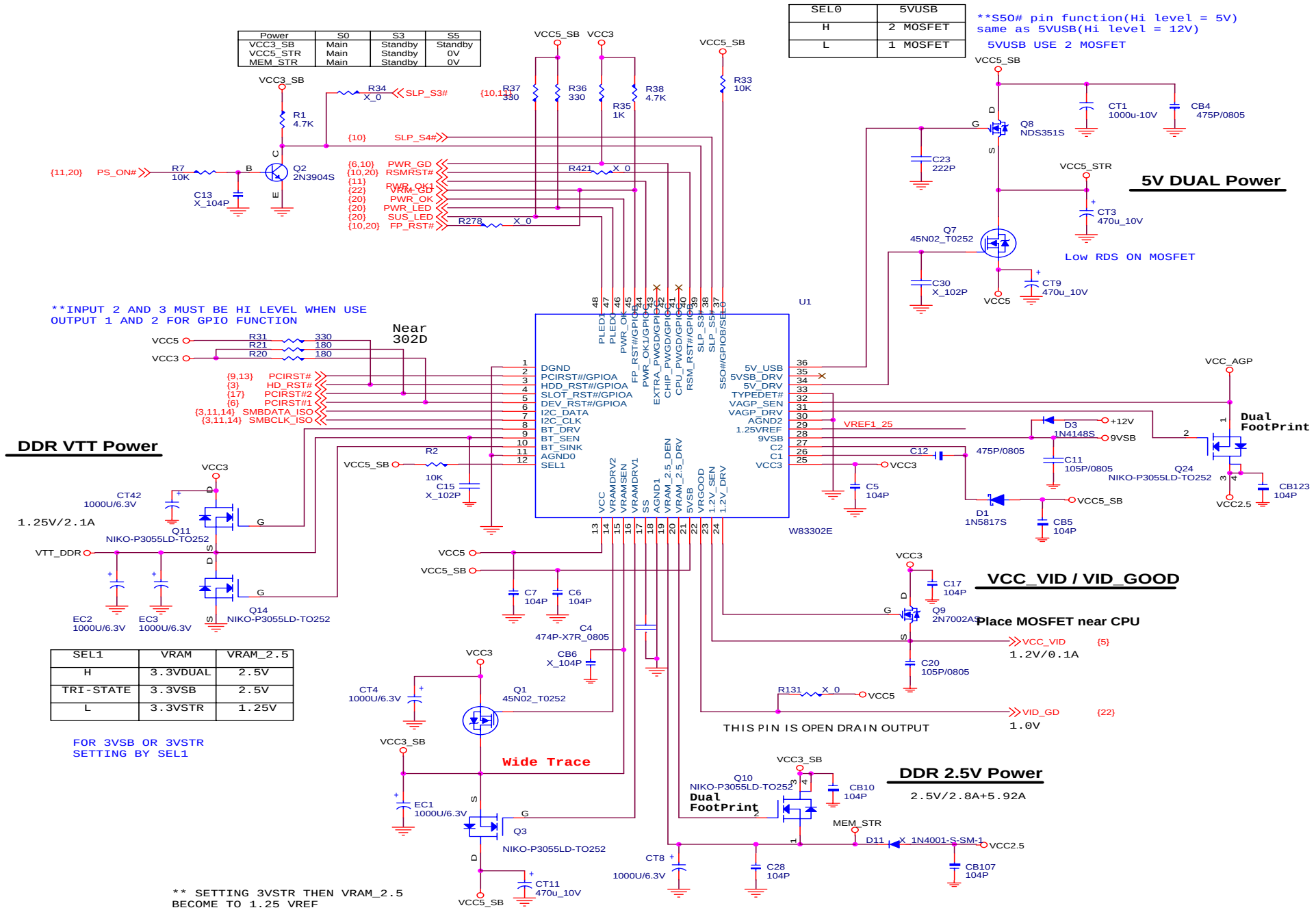
Intel 845 chipset platform power delivery map



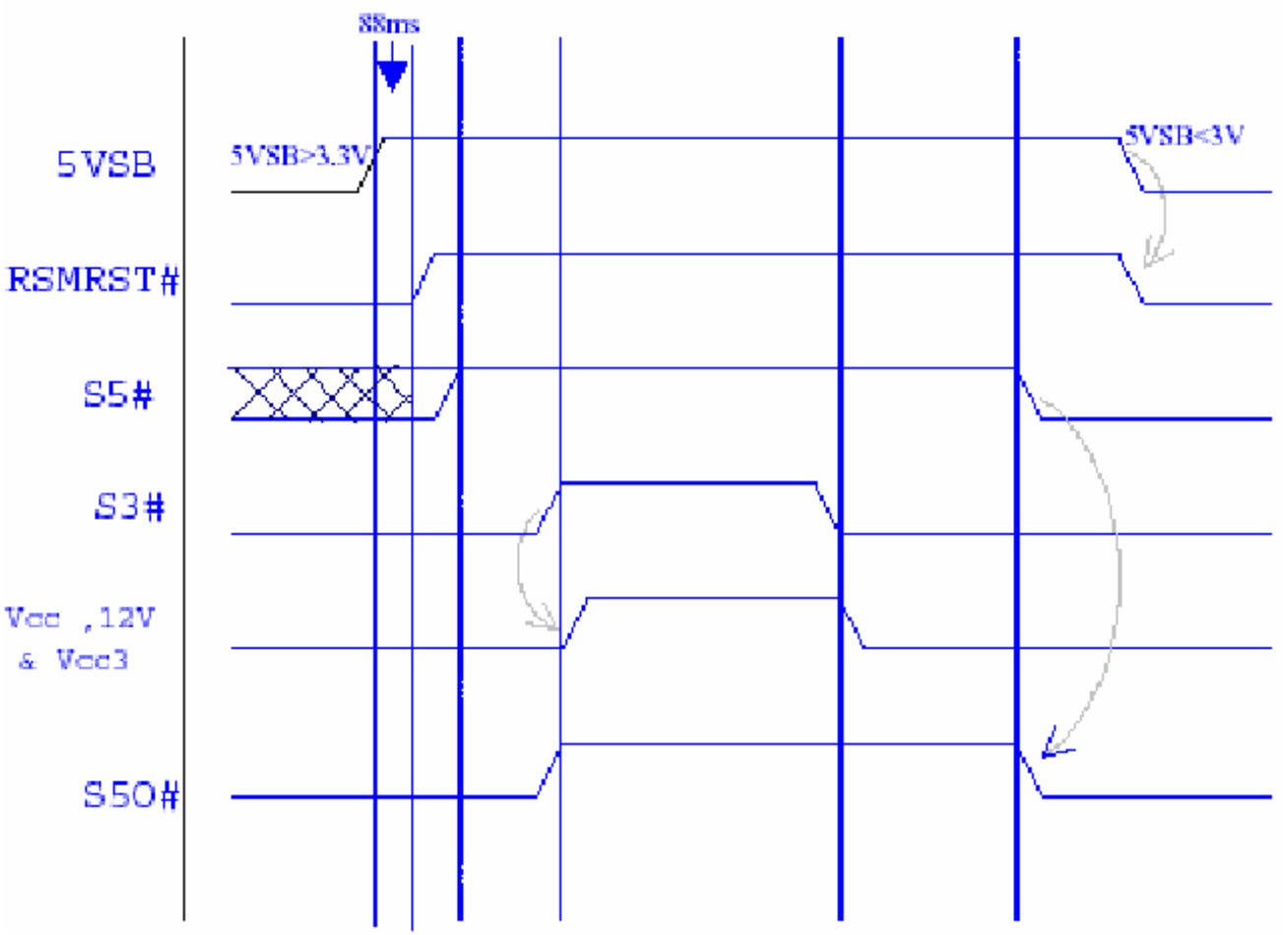
MS-5 Block Diagram



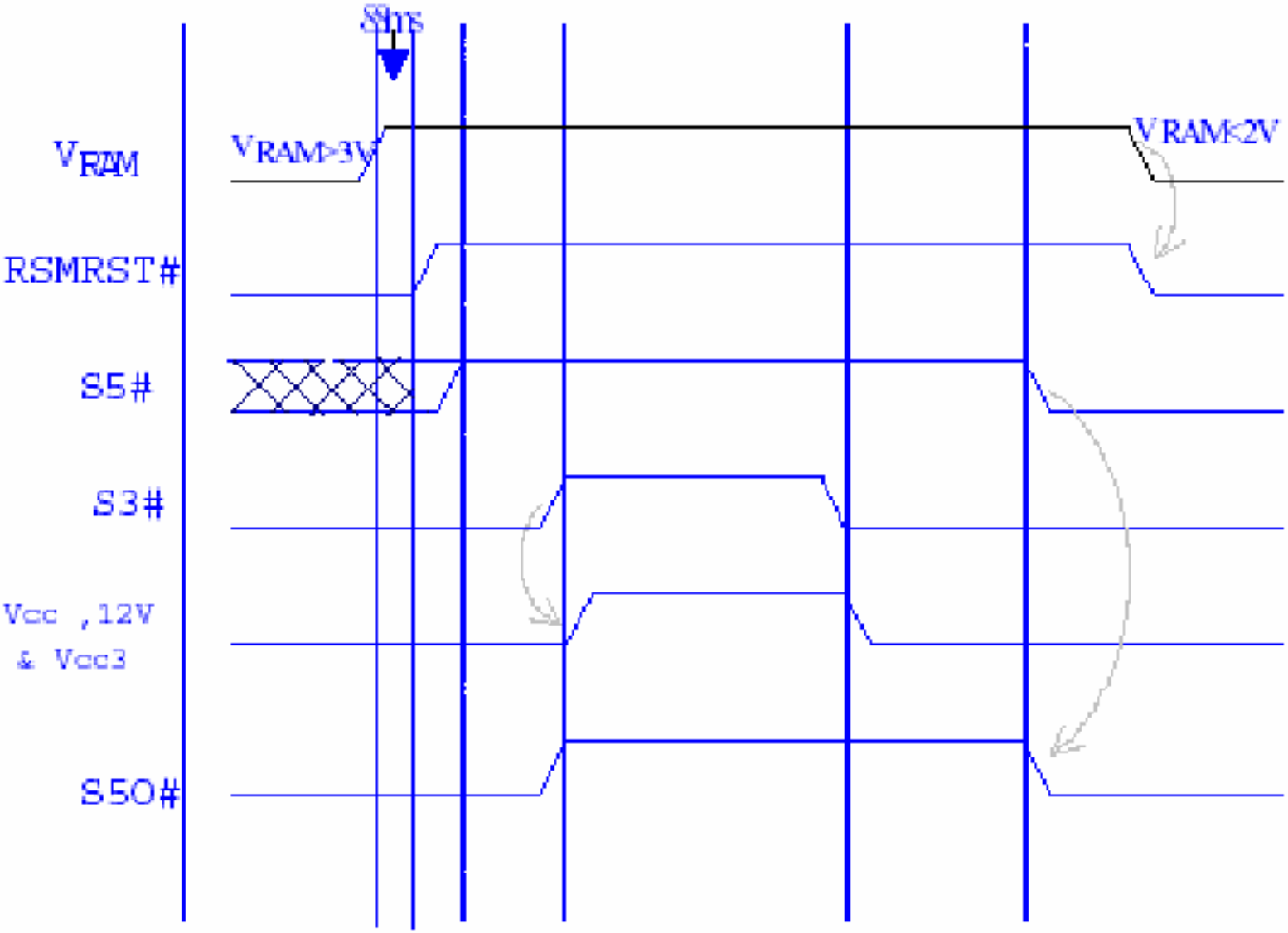
MS-5 Circuit


Power | S0 | S3 | S5
VCC3_SB | Main | Standby | Standby
VCC5_STR | Main | Standby | 0V
MEM_STR | Main | Standby | 0V
SEL0 | 5VUSB
H | 2 MOSFET
L | 1 MOSFET
**S50# pin function(Hi level = 5V)
same as 5VUSB(Hi level = 12V)
5VUSB USE 2 MOSFET
5V DUAL Power
Low RDS ON MOSFET
**INPUT 2 AND 3 MUST BE HI LEVEL WHEN USE
OUTPUT 1 AND 2 FOR GPIO FUNCTION
Near 302D
DDR VTT Power
1.25V/2.1A
W83302E
VCC_VID / VID_GOOD
Place MOSFET near CPU
VCC_VID {5}
1.2V/0.1A
VID_GD {22}
1.0V
THIS PIN IS OPEN DRAIN OUTPUT
DDR 2.5V Power
2.5V/2.8A+5.92A
Wide Trace
Dual FootPrint
SEL1 | VRAM | VRAM_2.5
H | 3.3VDUAL | 2.5V
TRI-STATE | 3.3VSB | 2.5V
L | 3.3VSTR | 1.25V
FOR 3VSB OR 3VSTR
SETTING BY SEL1
** SETTING 3VSTR THEN VRAM_2.5
BECOME TO 1.25 VREF

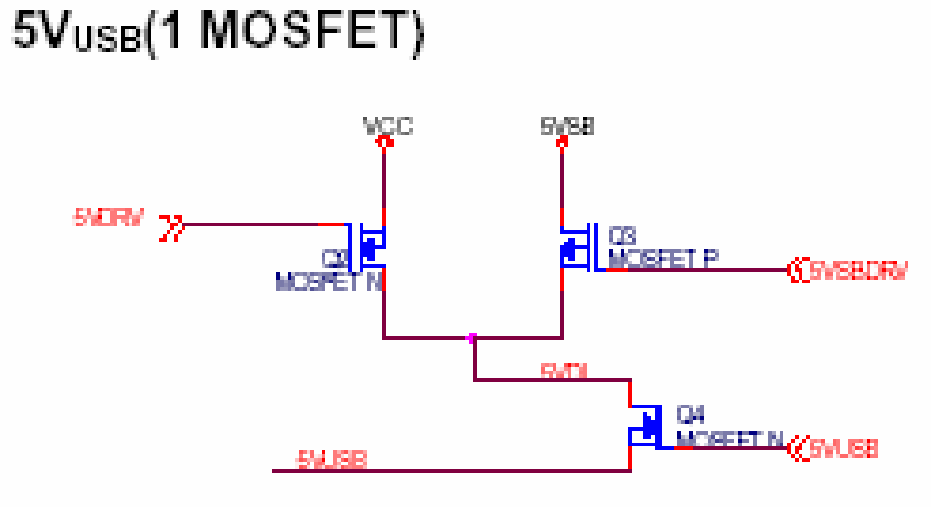
SYSTEM Power Sequence (S1=L)

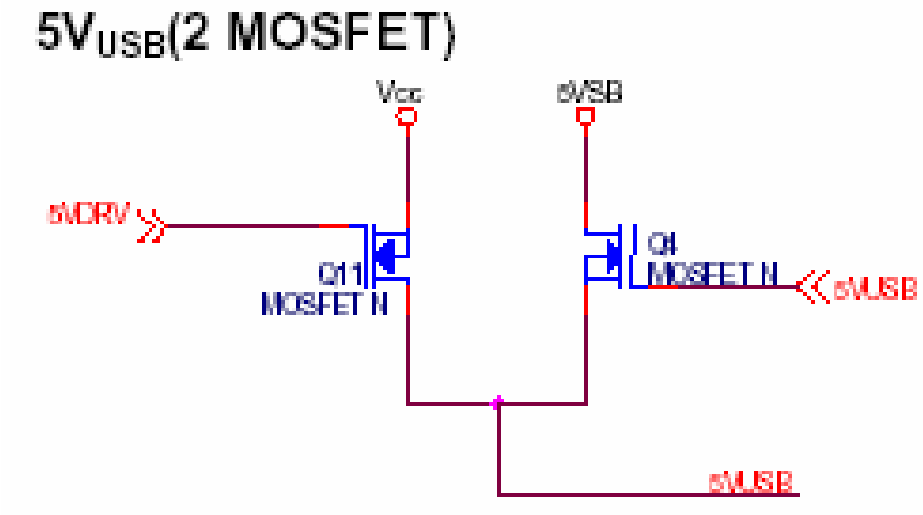


SYSTEM Power Sequence (S1=H or Tri-state)



5VDL/5VUSB Power Circuit



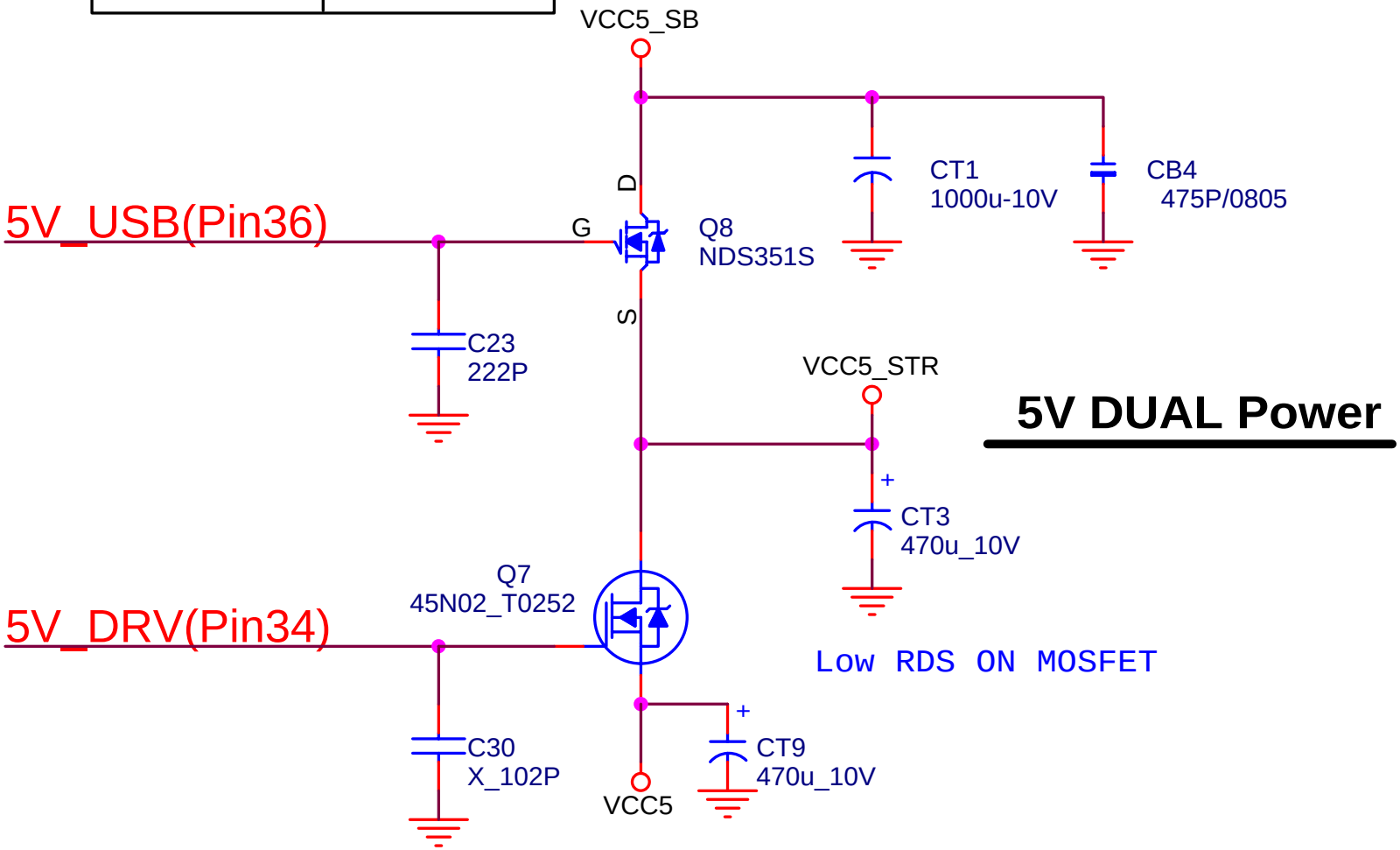


5VDUAL Power Circuit

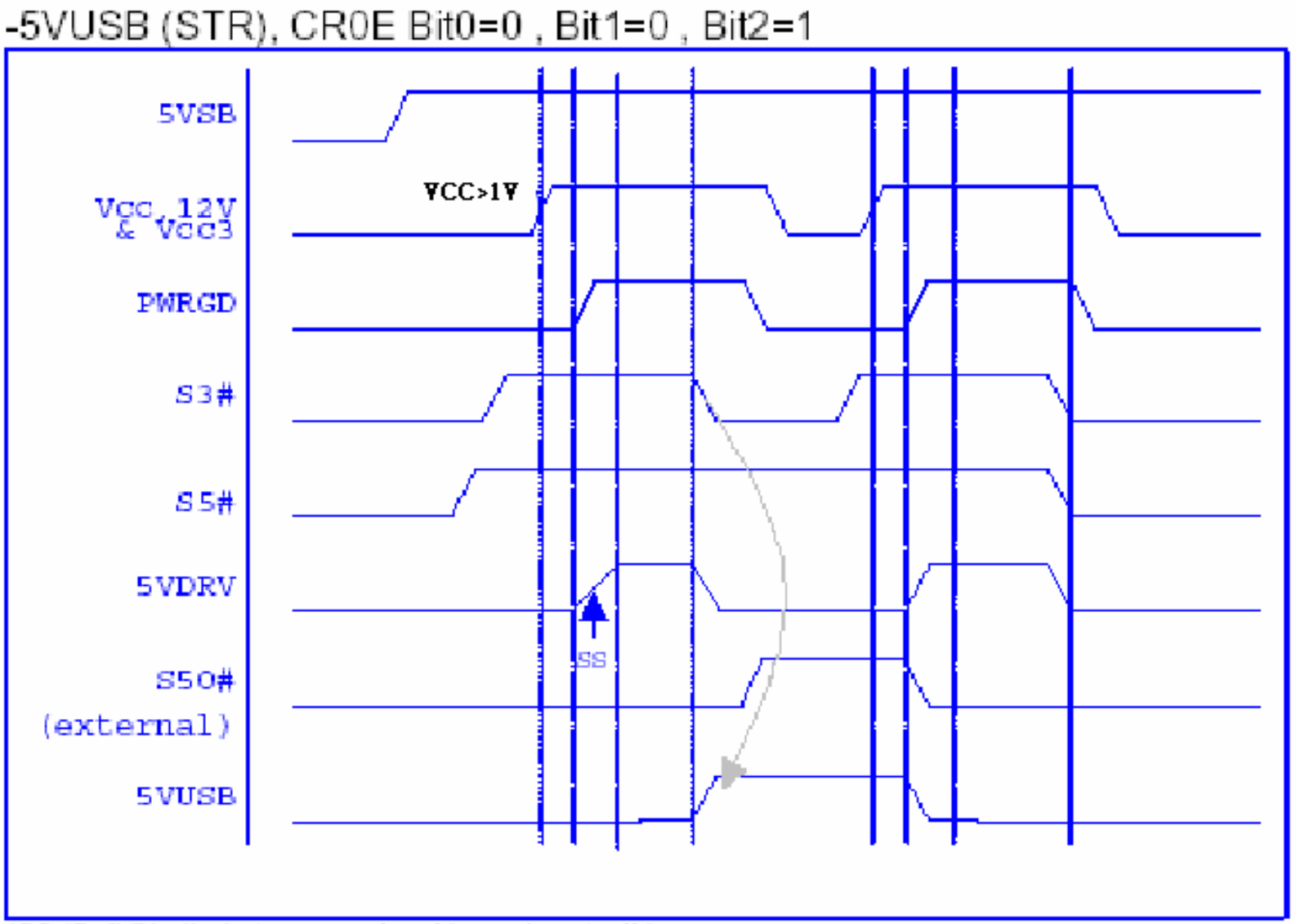
SEL0(Pin37)	5VUSB
H	2 MOSFET
L	1 MOSFET

**S5O# pin function(Hi level = 5V)
same as 5VUSB(Hi level = 12V)

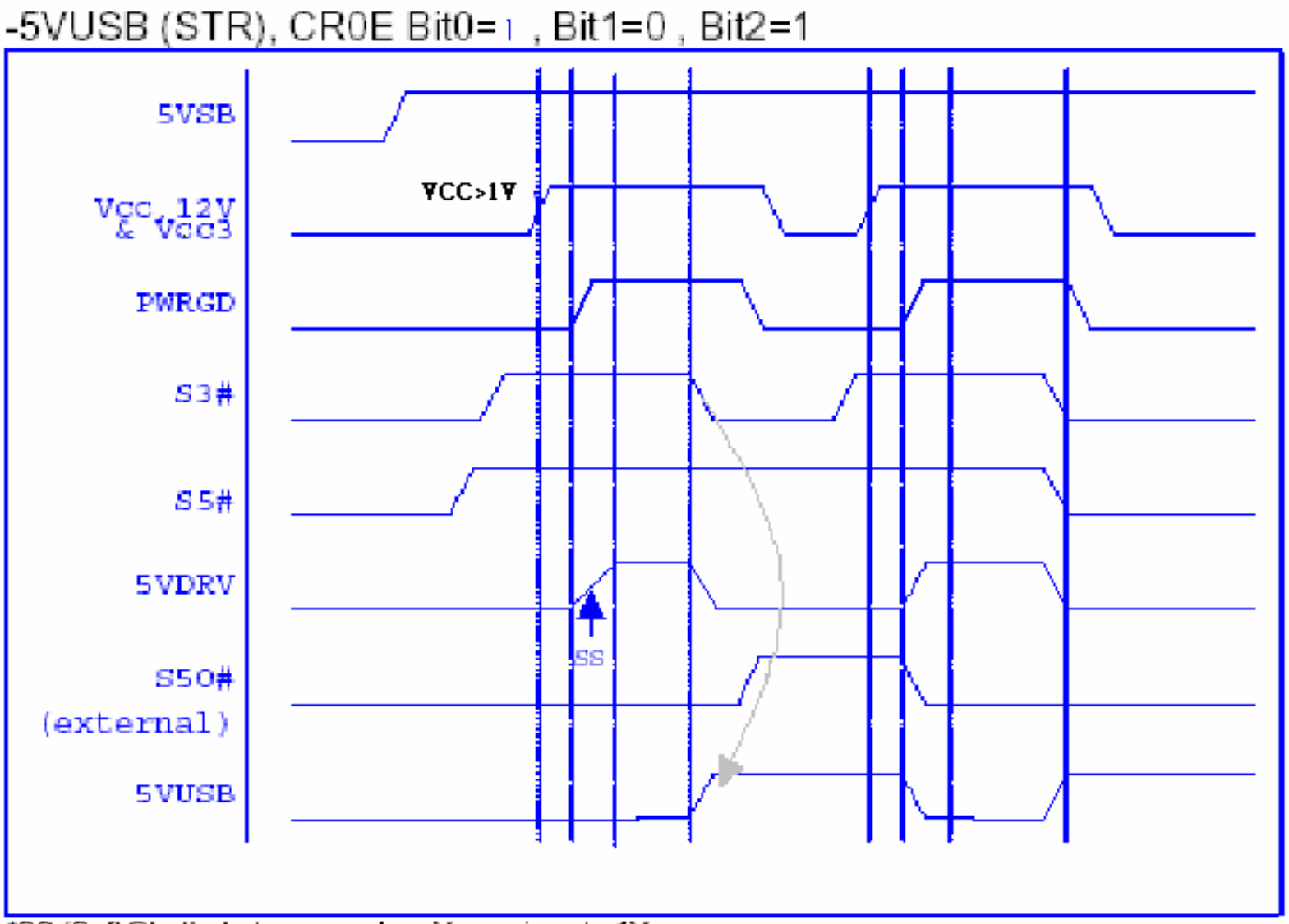
5VUSB USE 2 MOSFET



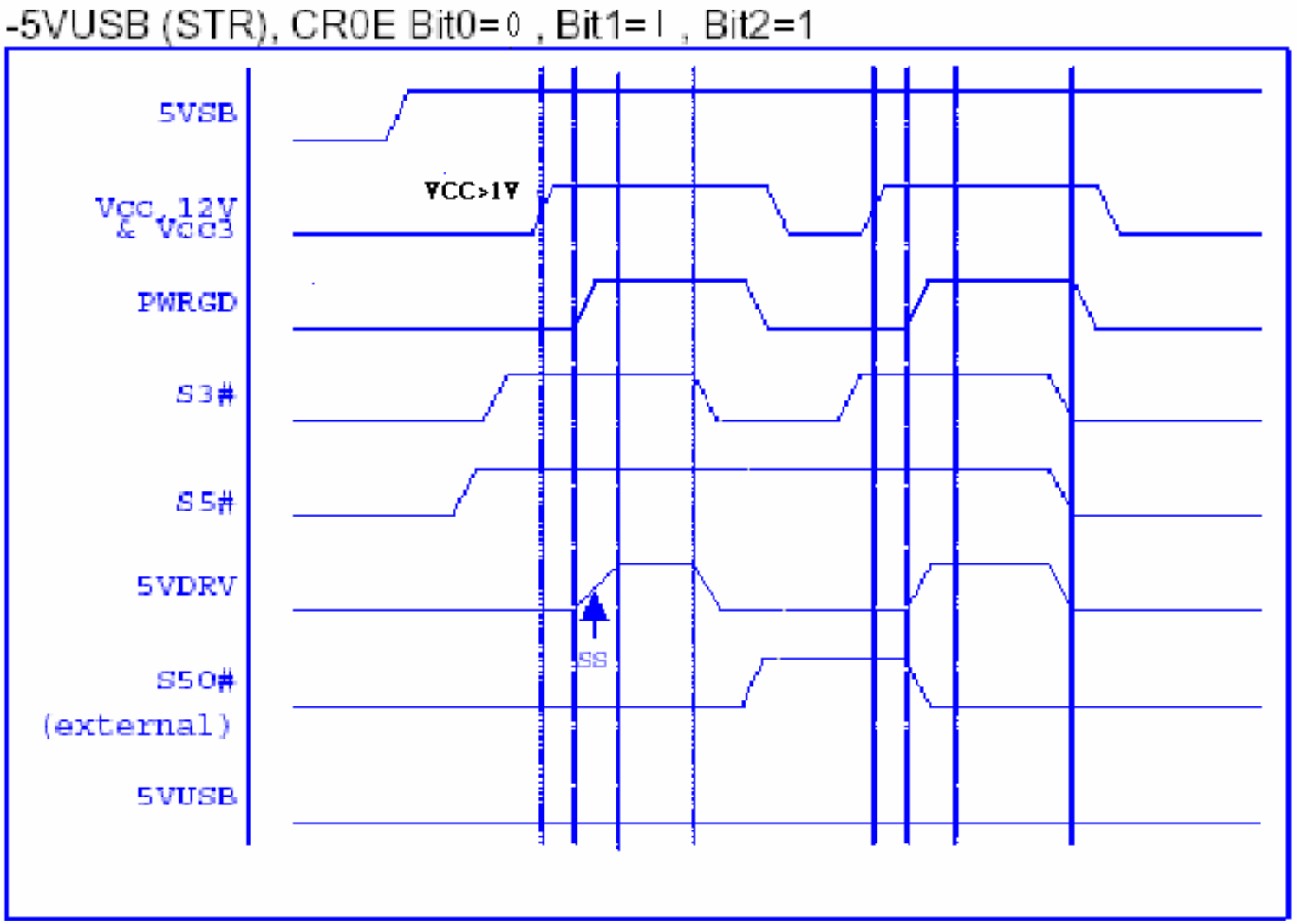
5VDUAL Power Sequence (STR)



5VDUAL Power Sequence (Dual)



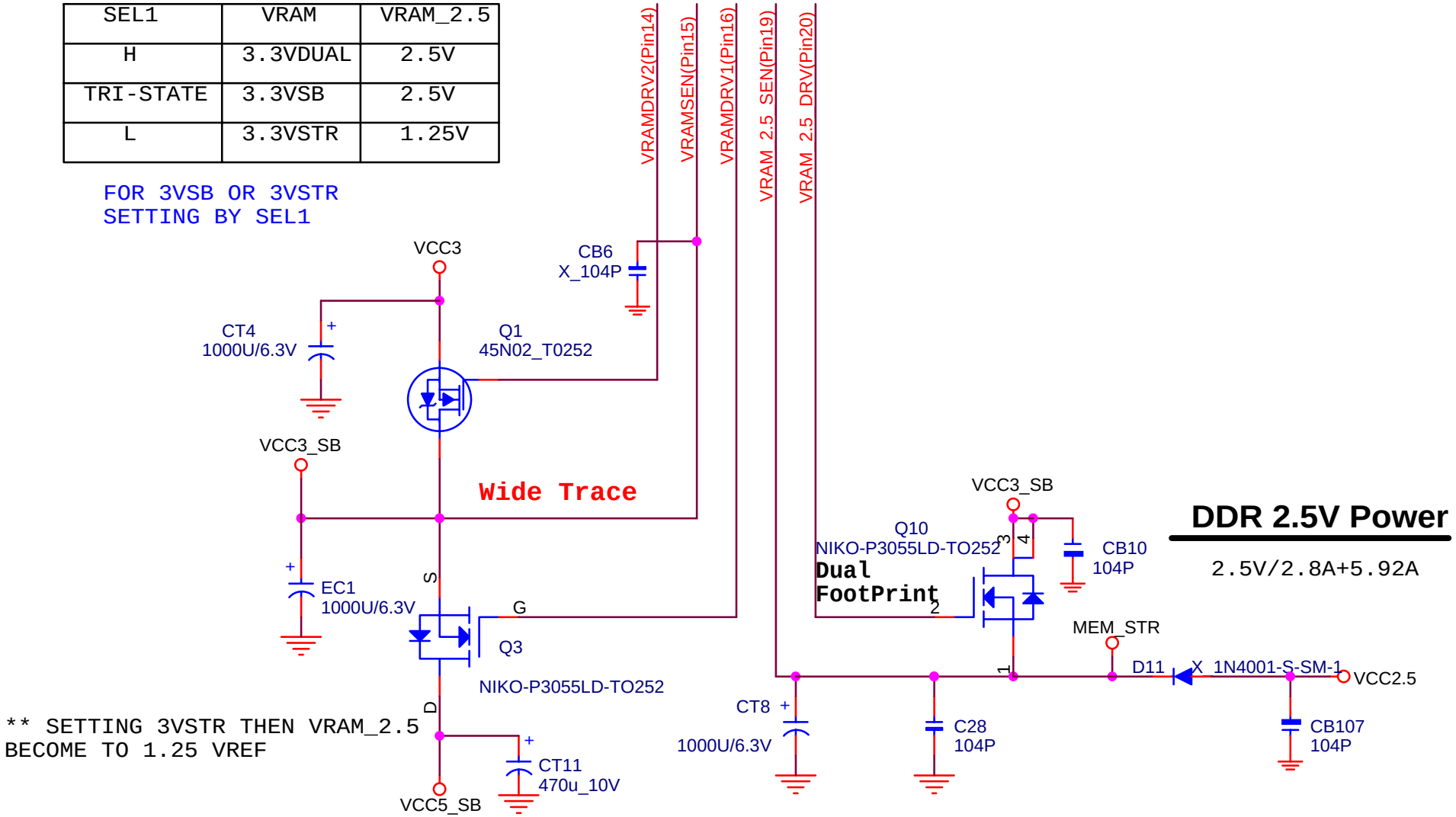
5VDUAL Power Sequence (5Vcc)



3VSB & DDR2.5V Circuit

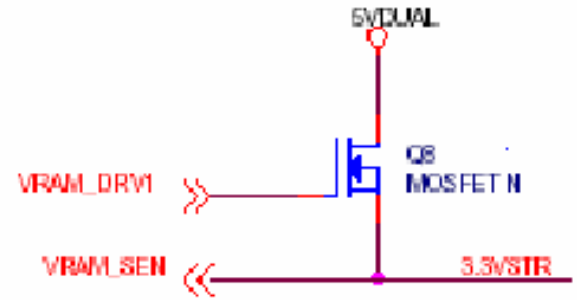
SEL1	VRAM	VRAM_2.5
H	3.3VDUAL	2.5V
TRI-STATE	3.3VSB	2.5V
L	3.3VSTR	1.25V

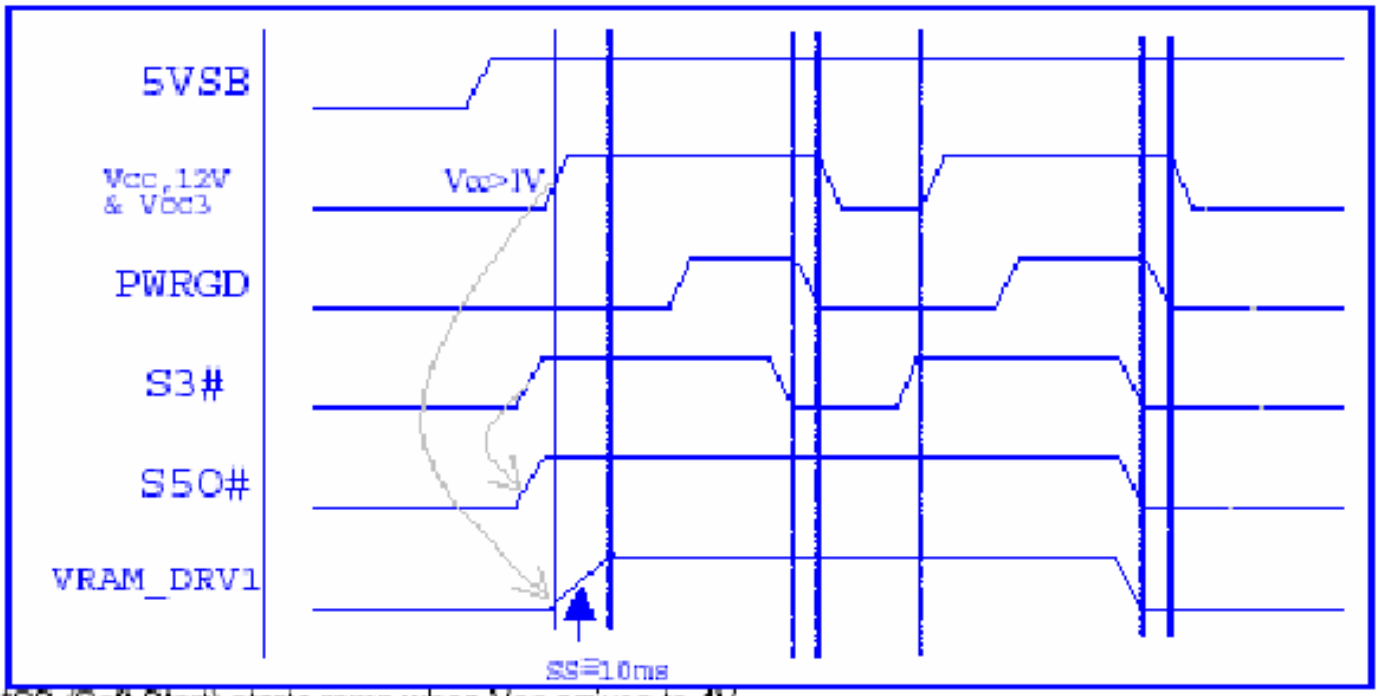
FOR 3VSB OR 3VSTR
SETTING BY SEL1



3VSB Power sequence (S1=0, 3.3VSTR)

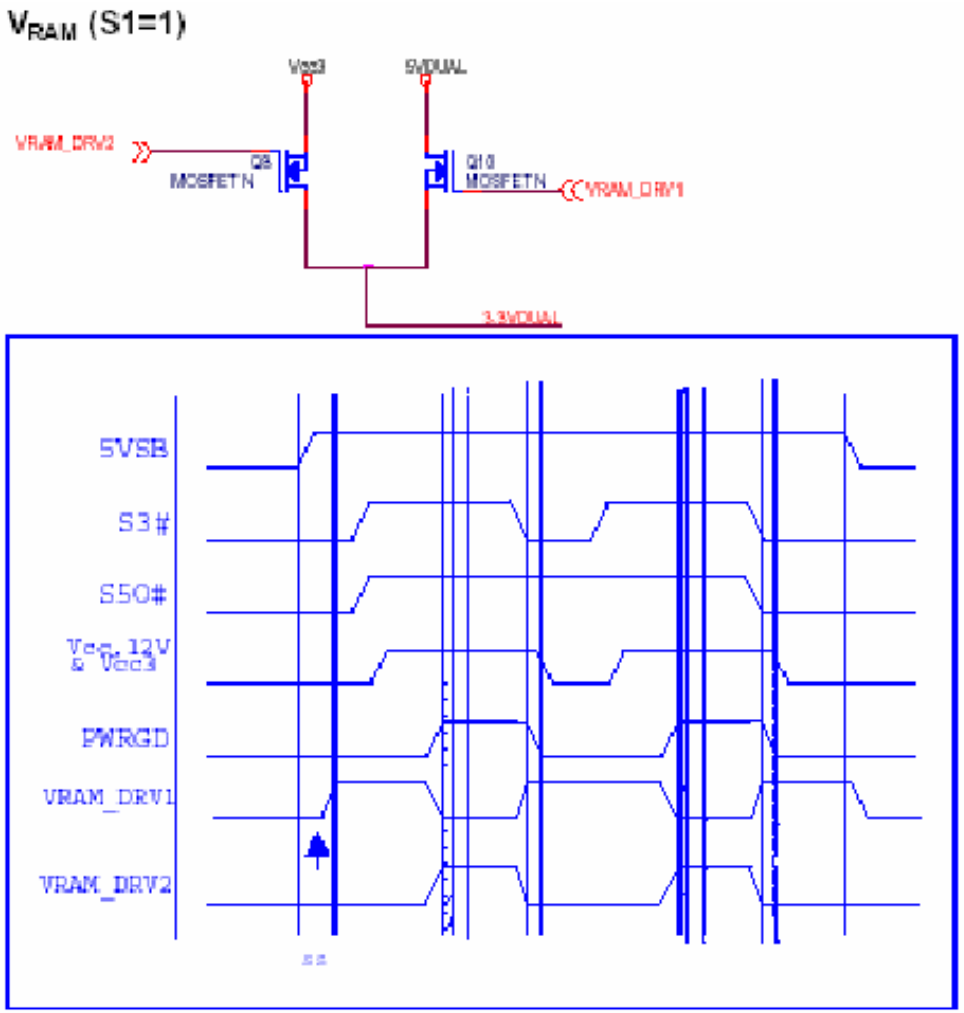
V_{RAM} (S1=0):





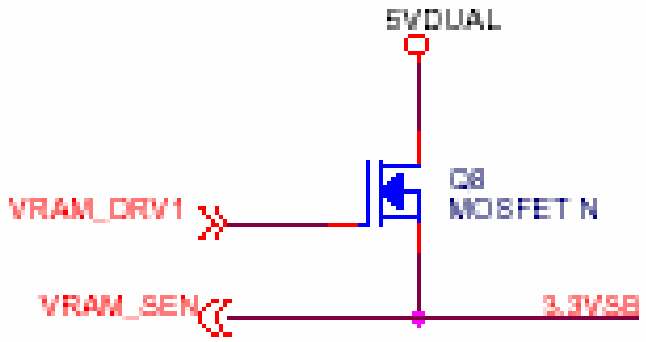
*SS (Soft-Start) starts ramp when Vcc arrives to 1V

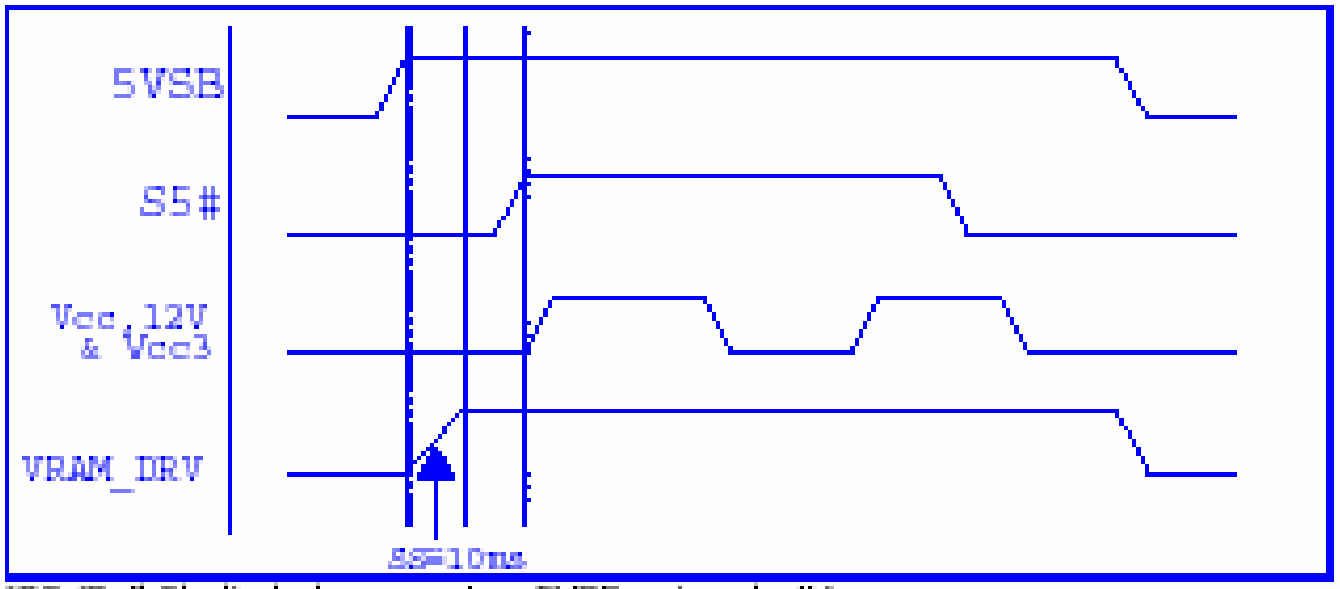
3VSB Power sequence (S1=1, 3.3VDUAL)



3VSB Power sequence (S1=Tri-state, 3.3VSB)

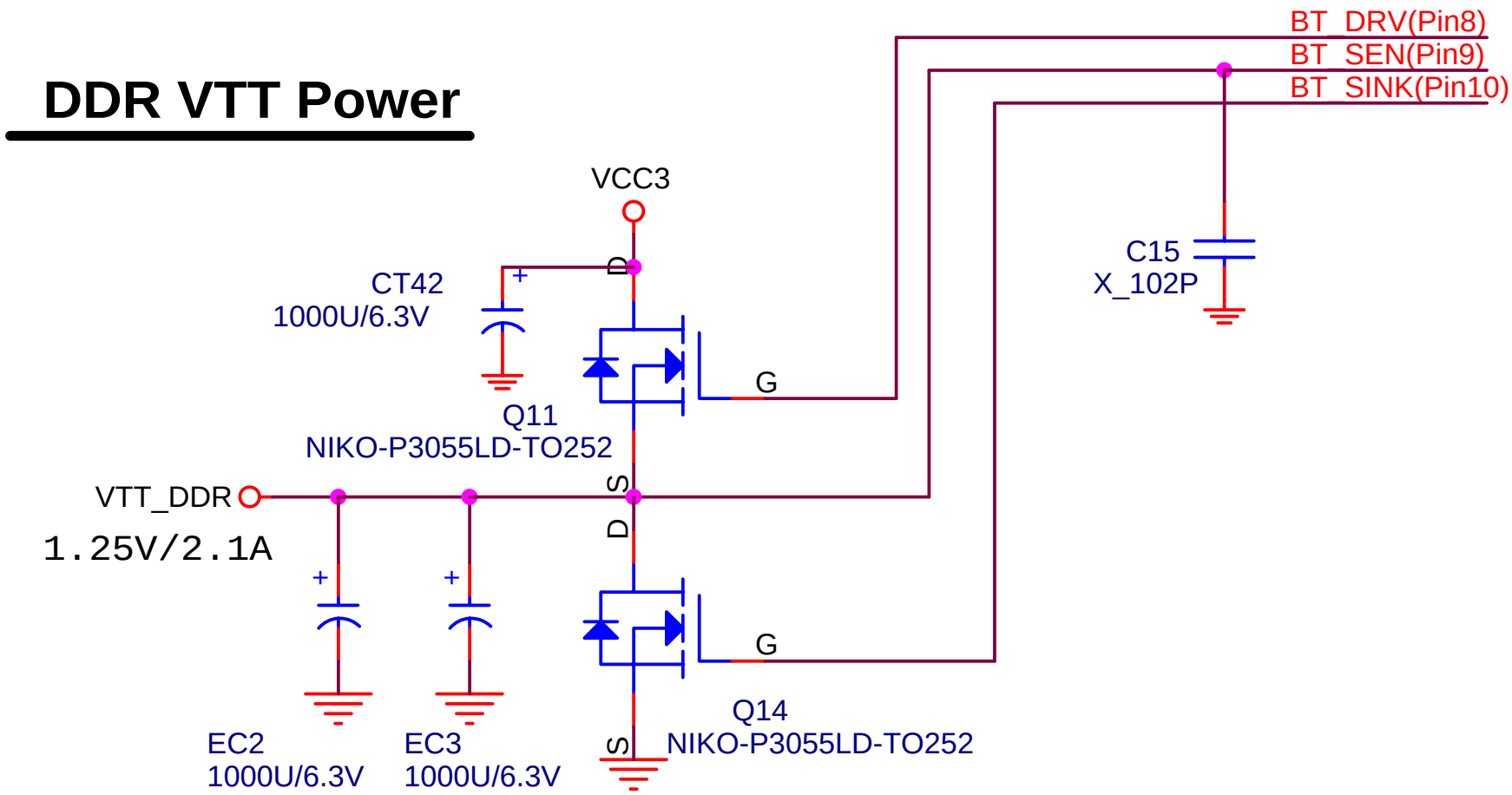
V_{RAM} (S1=Tri-state)



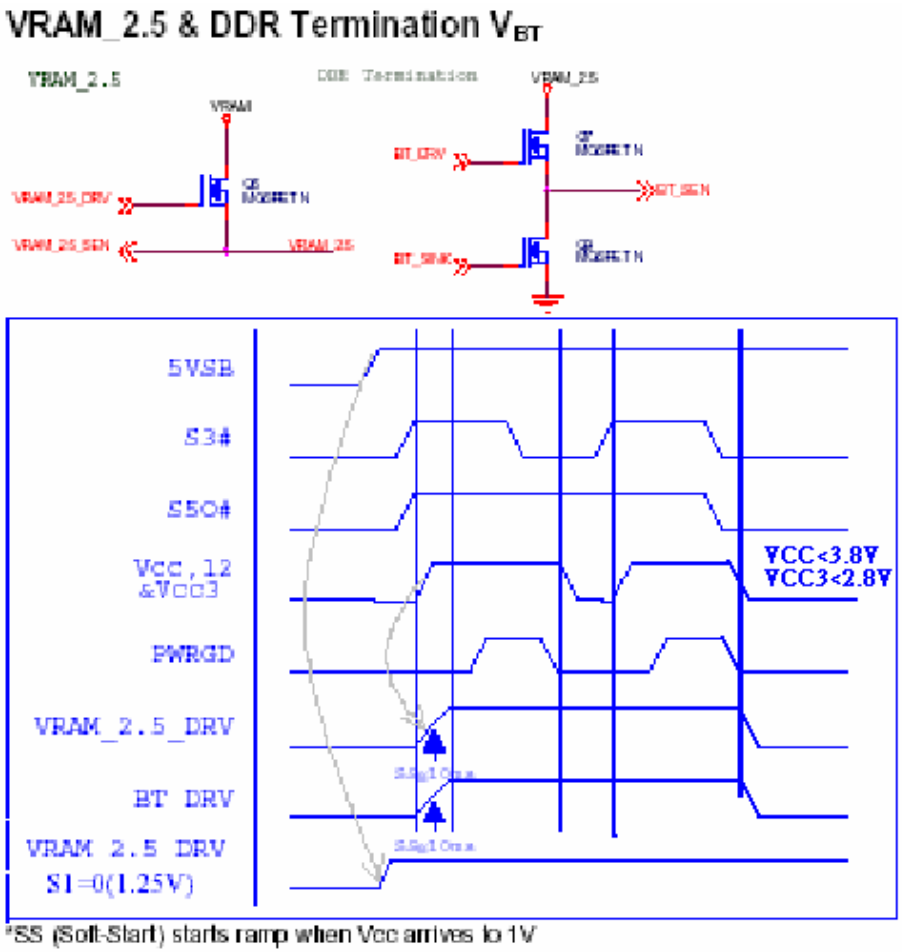


*SS (Soft-Start) starts ramp when 5VSB arrives to 4V

DDR VTT Circuit

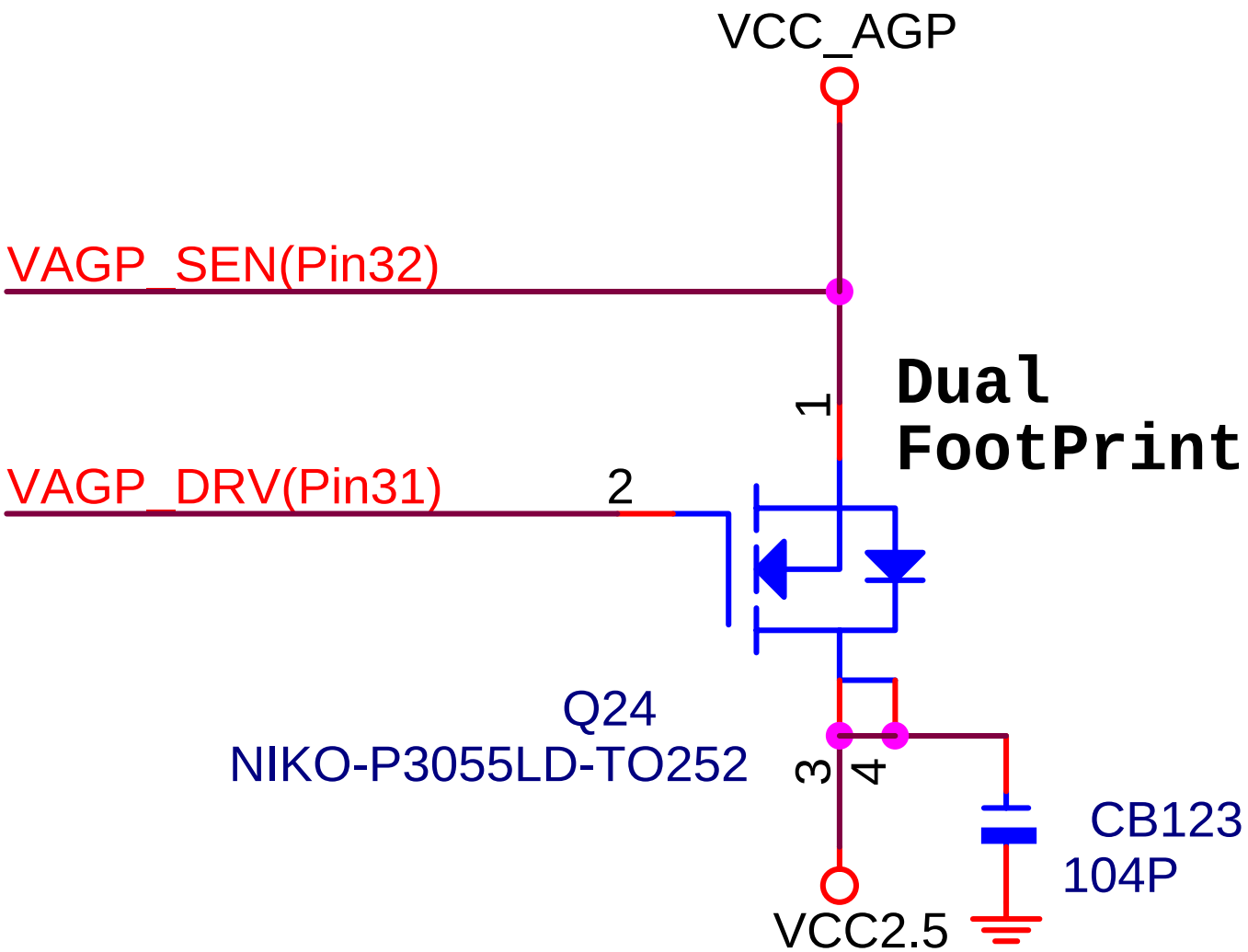


VRAM_2.5 and DDR Termination VTT power sequence



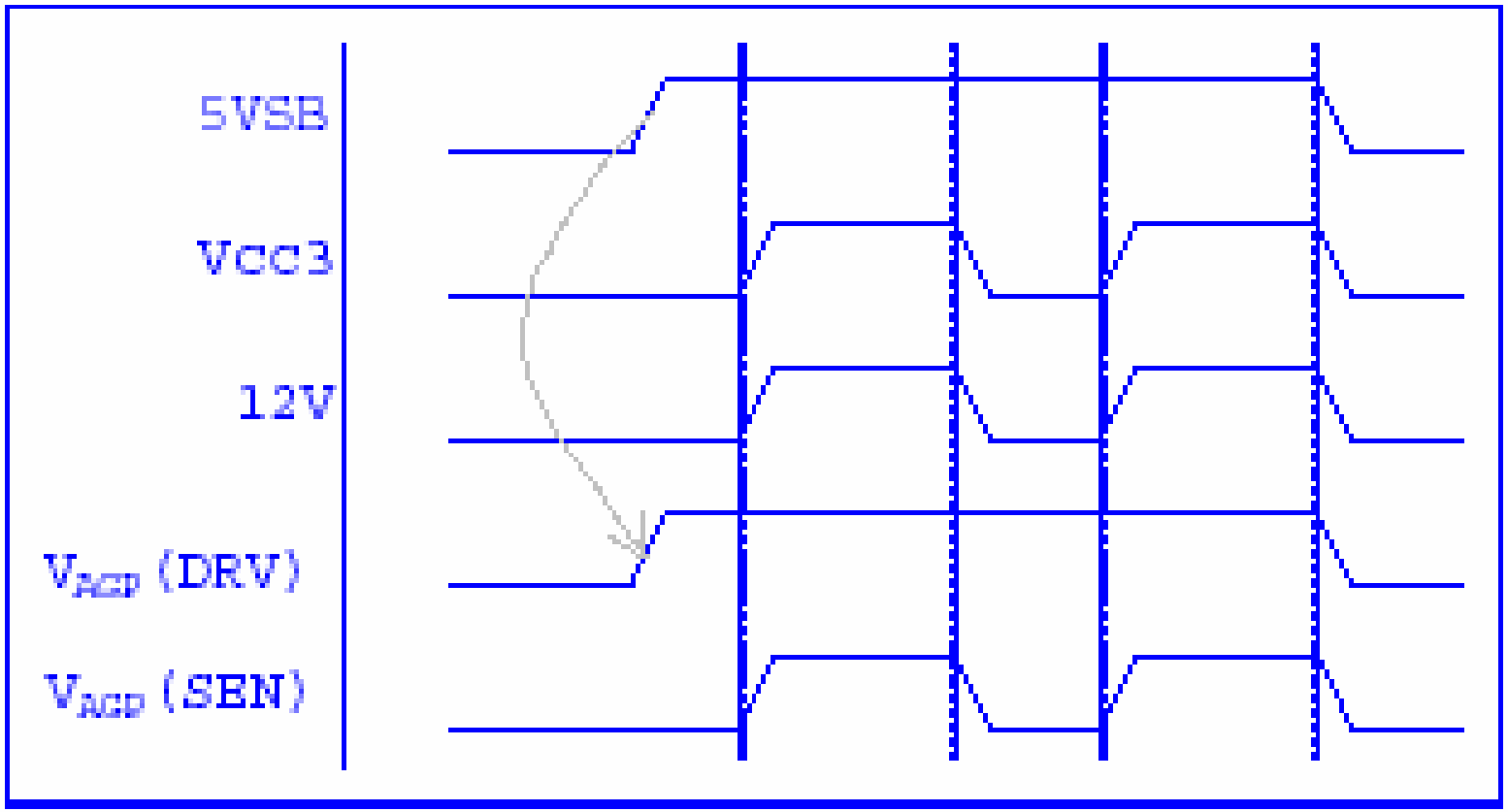
*SS (Soft-Start) starts ramp when Vcc arrives to 1V

VCC_AGP Circuit [TYPEDET#(Pin33)=0]

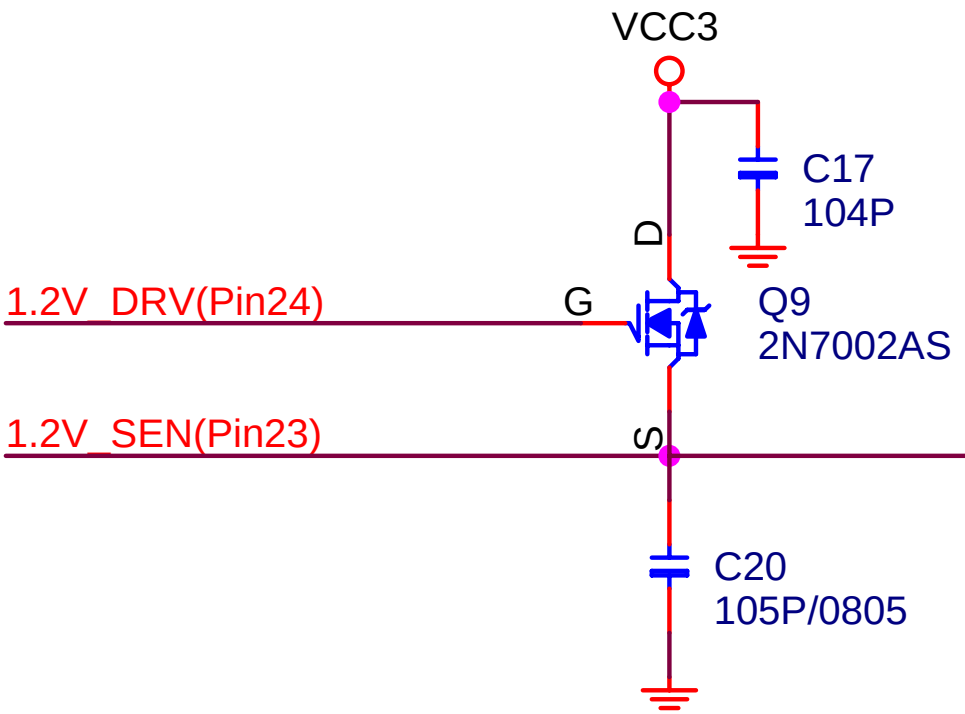


VCC_AGP Power Sequence

V_{AGP}:



VCC_VID Circuit



VCC_VID / VID_GOOD

Place MOSFET near CPU

VCC_VID {5}

1.2V/0.1A

VCC_VID Power Sequence

1.2V for Northwood or Tualatin CPU