



MT9800xxxxxx

LCD controller

Hardware Reset and Power Sequence

Version: 0.1
Release date: 2019-09-09

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Document Revision History

Revision	Date	Author	Description
0.1	2019-09-09	Ken-HW Chang	Initial release

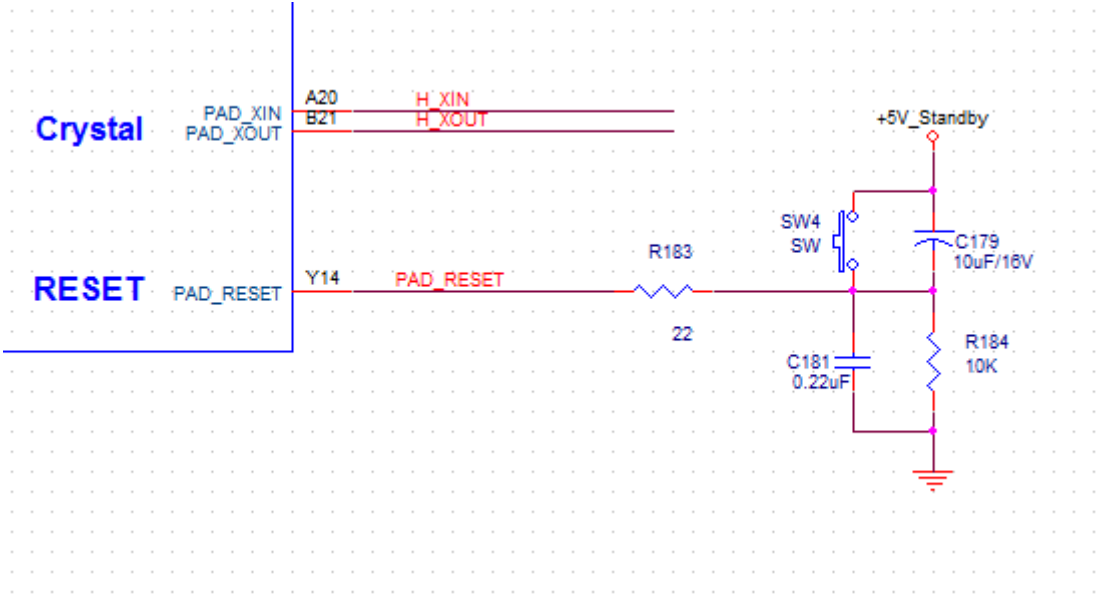


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HW Design Note for Reset Circuit

Reset Circuit



Power On and Reset Sequence

External 3.3V LDO (or buck converter)+ External 1.5/1.8V LDO (or buck converter)+ External 0.95V LDO (or buck converter) + Reset

For external 3.3V LDO (or buck converter) + external 1.5/1.8V LDO (or buck converter) + external 0.95V LDO (or buck converter) + Reset, the timing is as Figure 1. The RST waveform must satisfy Table 1.

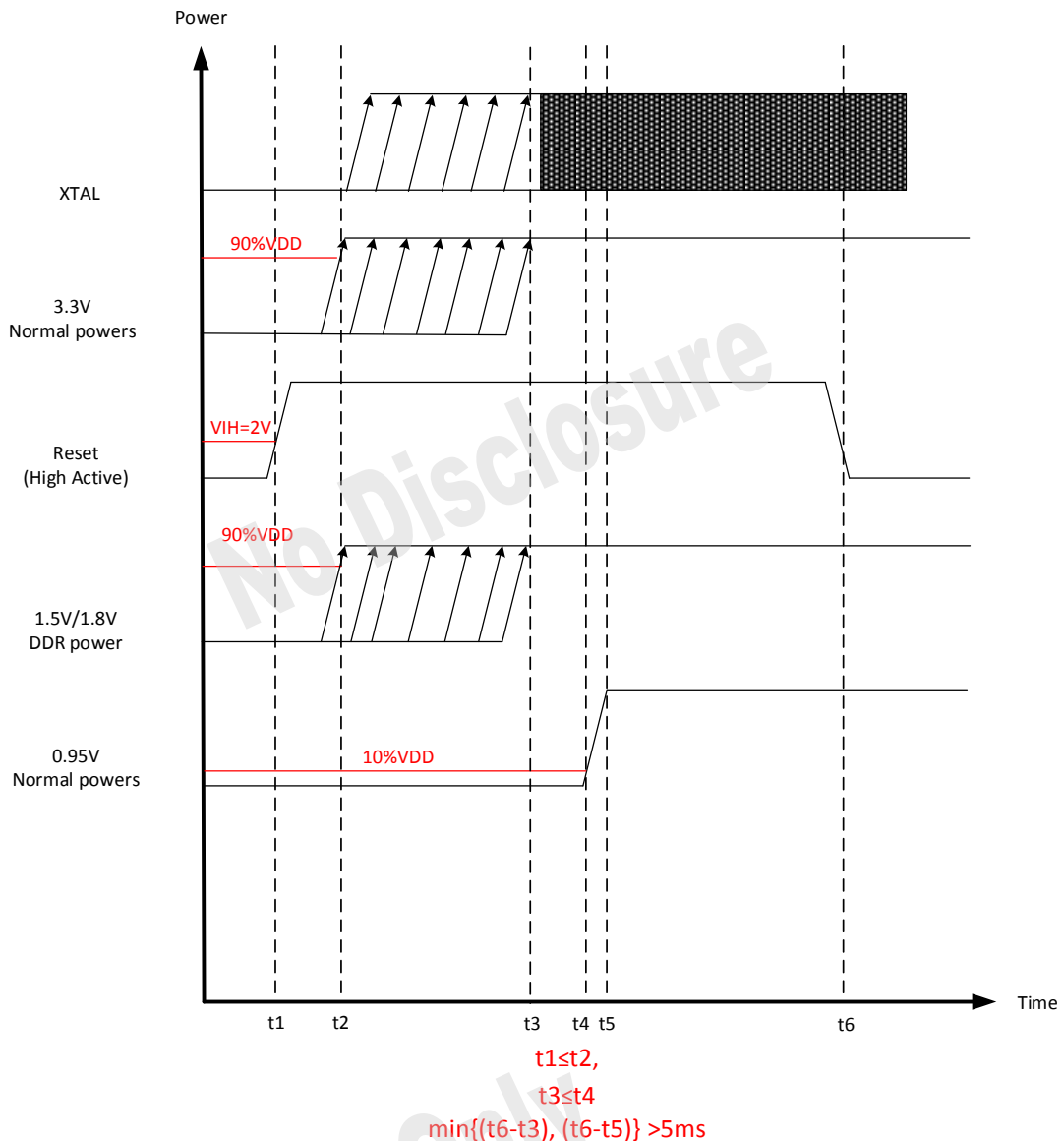


Figure 1: Correct Power Sequence for External 3.3V LDO or buck) + External 1.5/1.8V LDO (or buck) + External 0.95V LDO (or buck) + Reset

Note 1: Timing for 3.3V set ready could lead or behind DDR power.

t2 = Timing to 90%VDD

t3 = 3.3V/XTAL ready

Note 2: 3.3V Normal Power (AVDD_EAR33, AVDD_DPRX, AVDD_DPTX, AVDD_HDMIRX, AVDD_ADC, AVDD_AUSDM, AVDD_PLL, AVDD_LPLL, AVDD_MOD, AVDD_USB, AVDD_XTAL, VDDP, AVDD_DPCR, AVDD_USB31C).

1.5/1.8V Normal power (AVDD_DDR, VDDIO_DRAM, VDD_DRAM, AVDD_MOD_LDO).

0.95V Normal power (VDD, AVDDL_DPRX, AVDDL_HDMIRX, AVDDL_DPTX, AVDDL_DPCR, AVDDL_USB31CRX, AVDDL_USB31CTX, AVDDL_HUBRX, AVDDL_HUBTX, DVDD_NODIE, DVDD_DDR, AVDDL_MOD).

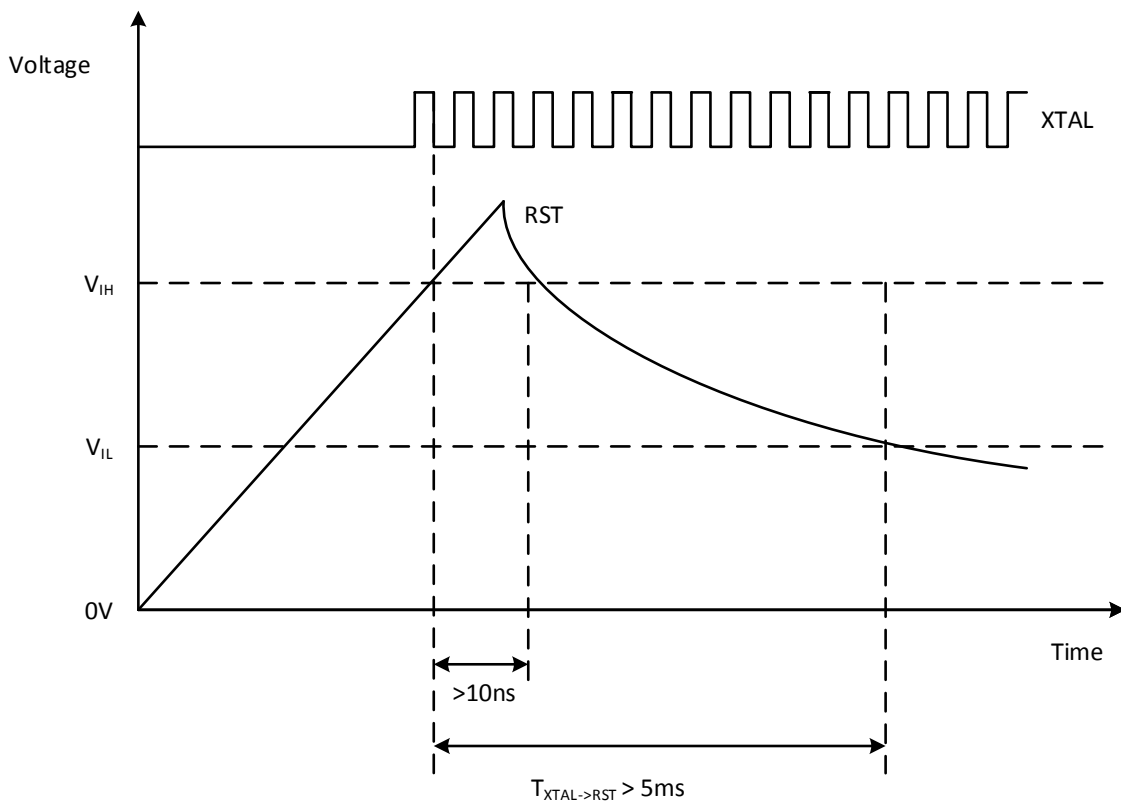


Figure 2: Reset Diagram

Table 1: Power & Reset Sequence

Parameter	Value	Unit
T _{XTAL->RST}	5	ms
VIH	2.0	V
VIL	0.9	V

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