

The diagram illustrates the electrical connection between an LCD module and a V33P3D header. The LCD module, labeled 'P1' and 'XF2M-4015-1A', features a series of pins on the left side, each with a specific function. These pins are connected to the corresponding pins on the V33P3D header, which is a 40-pin connector. The LCD module also includes several passive components: capacitors C31 (10uF, C2012) and C32 (0.1uF, C1808) connected to GND; capacitor C87 (1nF, C1808) connected to GND; and resistors R33 (1k, R1808) and R34 (1k, DNI) connected to GND. The V33P3D header is connected to a 3.3V power source (V33P3D) and a GND connection. The LCD module is also connected to a 3.3V power source (V33P3D) and a GND connection. The LCD module is labeled 'P1' and 'XF2M-4015-1A'.

Pin Connections:

- Pin 1: LED-K
- Pin 2: LED-A
- Pin 3: LCD_R7
- Pin 4: LCD_R3
- Pin 5: LCD_R4
- Pin 6: LCD_R5
- Pin 7: LCD_R6
- Pin 8: LCD_R7
- Pin 9: LCD_G7/CFG4
- Pin 10: LCD_G2
- Pin 11: LCD_G3/CFG0
- Pin 12: LCD_G4/CFG1
- Pin 13: LCD_G5/CFG2
- Pin 14: LCD_G6/CFG3
- Pin 15: LCD_G7/CFG4
- Pin 16: LCD_B7
- Pin 17: LCD_B3
- Pin 18: LCD_B4
- Pin 19: LCD_B5
- Pin 20: LCD_B6
- Pin 21: LCD_B7
- Pin 22: DCLK
- Pin 23: DISP_ON/OFF
- Pin 24: HSYNC
- Pin 25: VSYNC
- Pin 26: DE
- Pin 27: GND
- Pin 28: GND
- Pin 29: GND
- Pin 30: GND
- Pin 31: GND
- Pin 32: GND
- Pin 33: GND
- Pin 34: GND
- Pin 35: GND
- Pin 36: GND
- Pin 37: GND
- Pin 38: GND
- Pin 39: GND
- Pin 40: GND

Component Values:

- C31: 10uF, C2012
- C32: 0.1uF, C1808
- C87: 1nF, C1808
- R33: 1k, R1808
- R34: 1k, DNI

Power and Ground Connections:

- V33P3D: 3.3V
- GND: Ground

LCD Backlight

The schematic diagram illustrates the LCD Backlight circuit. It shows the power supply path starting from V3P3D, passing through a series of capacitors (TC11, TC20, TC14) and inductors (L5, L6) to filter the 3.3V supply. A MOSFET (U4, KTD2511DEHD-TR) is used to switch the backlight LEDs (LED-A, LED-K) through a current-limiting resistor (R25, R26). The MOSFET's gate is driven by the filtered 3.3V supply, and its source is connected to ground. The drain is connected to the LEDs. The LEDs are connected to ground through a current-limiting resistor (R25, R26). The MOSFET's threshold voltage (Vth) is 1.5V, and its maximum drain current (Id) is 25mA. The MOSFET is a P-channel MOSFET. The MOSFET's gate is connected to the filtered 3.3V supply. The MOSFET's source is connected to ground. The MOSFET's drain is connected to the LEDs. The LEDs are connected to ground through a current-limiting resistor (R25, R26).

BOOT MODE	
Normal	H
Masstorage	L

MODE

<1> MODE_SW

MODE_SW

R43 10K

BSI-10

BSI-11

SW2

2 1 3

V3P3D

Power On Config MODE	CFG[o..4]				
	0	1	2	3	4
JTAG DEBUG MODE	L	H	X	X	H
Serial Flash Boot Mode	H	H	L	L	H
NAND Boot Mode 4bit ECC	H	L	H	L	H

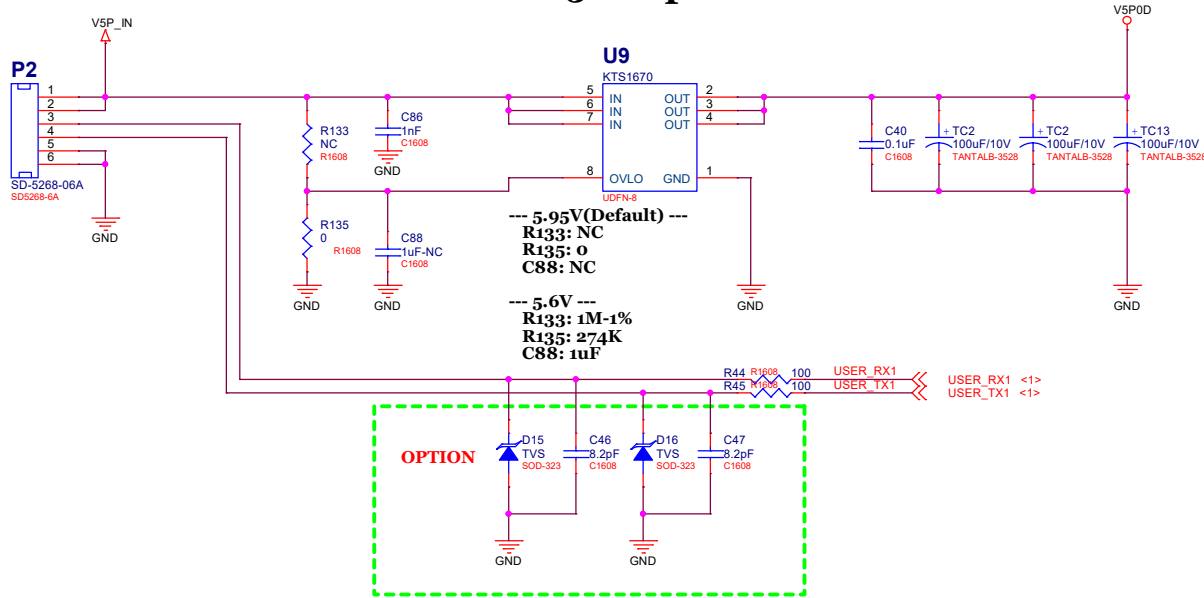
The schematic diagram illustrates the touch controller circuit for the AK4183 (U5). The circuit is powered by a V3P3D supply. The input network consists of resistors R27 (1.5K), R28 (1.5K), R29 (10K), and R30 (10K), all with a tolerance of 1608. The AK4183 is connected to the IIRQ1_TOUCH signal (pin 8), TWI_SDA (pin 9), and TWI_SCL (pin 10). The output signals are IIRQ1_TOUCH, TWI_SDA, and TWI_SCL. The circuit also includes a TC4 100uF/10V tantalum capacitor (C35) and several other capacitors (C36, C37, C38, C39) for timing and filtering. The AK4183 is a TMSOP_10 package.

PCB PAIR 52271-04 (BOTTOM)
TP L5 W9.6

The diagram shows a PCB layout with four signal lines at the top: XL, YL, XR, and YU. These lines connect to a component labeled 52271-04 (BOTTOM) with pins 1, 2, 3, and 4. Below the component, a green dashed box encloses a circuit labeled **OPTION**. This circuit consists of four TVS diodes, D9, D10, D11, and D12, all of type SOD-323. Each diode is connected in series between a signal line and a common ground (GND) line. Specifically, D9 is between XL and GND, D10 is between YL and GND, D11 is between XR and GND, and D12 is between YU and GND.

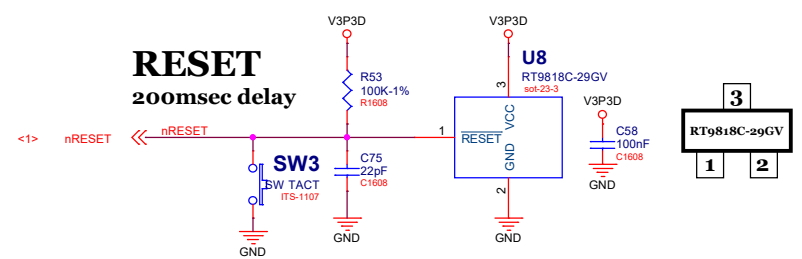
		(주)에이디칩스 14056 경기도 안양시 동안구 학위로 282, A동 22층 (관왕동, 금강원테리를 11타워) http://www.adc.co.kr	
Title adStar-D LCM			
		Designed by eunha.Kim eunha@adc.co.kr	
Size A3	Page Subtitle 4.5" TFT LCD & TOUCH & CONFIG	Ver. 3.1	
Date : Friday, July 20, 2018		Page 3 of 5	

Power : 5V Input



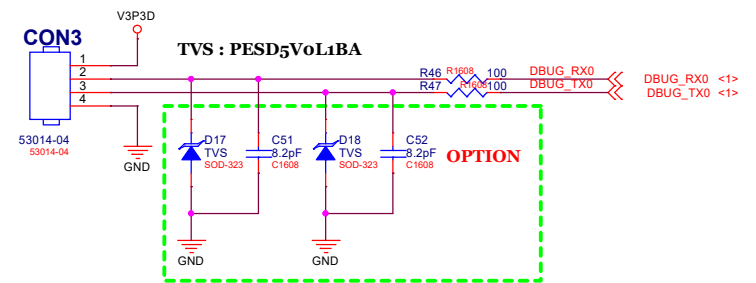
RESET

200msec delay

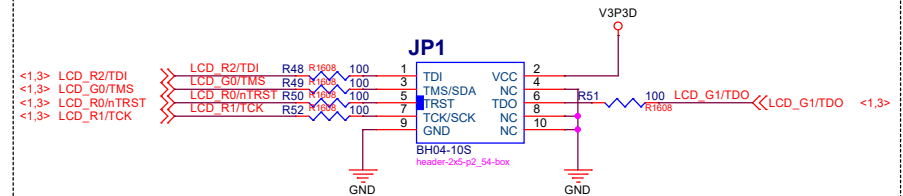
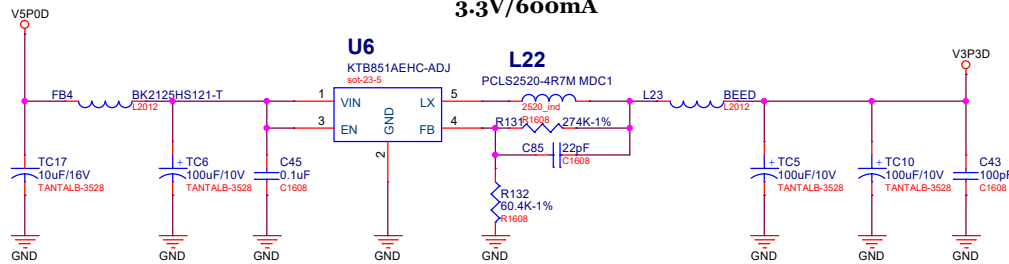


CON3

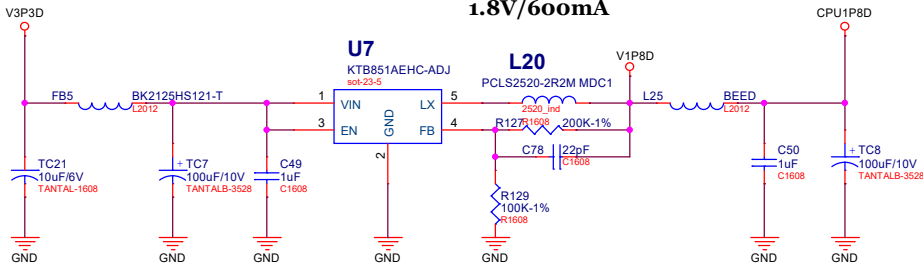
TVS : PESD5VoLiBA



3.3V/600mA




1.8V/600mA



adStar-D LCM

Version	Date	Description
Ver : 3.0	July 13, 2018	OVP(Over Voltage Protection) add ("KTS1670") 1.8V, 3.3V LDO Change (LM1118 -> "KTB851AEHC-ADJ") Reset IC add ("RT9818C-29GV") LCD Backlight Change(R1204N313D-FE->"KTD2511DEHD-TR")
Ver : 3.1	Jan 17, 2019	JP1 14Pin -> 10Pin으로 변경



advanced digital chips inc.

(주)에이디칩스

14056 경기도 안양시 동안구 학회로 282, A동 22층
(관양동, 금강벤처리움 IT타워)
<http://www.adc.co.kr>

Title

adStar-D LCM

Designed by eunha.Kim
eunha@adc.co.kr

Size

Page Subtitle

Ver.

A3

History

3.1

Date : Friday, January 18, 2019

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