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Not mounted!

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4.3" 480x272 TFT LCD interface

Not mounted!

UL = UnLoaded = normally not mounted component.

Default jumper settings are indicated in the schematic.
However, always check jumper positions on actual boards
since there is no guarantee that all jumpers are in default place.

Rev PA1

First revision



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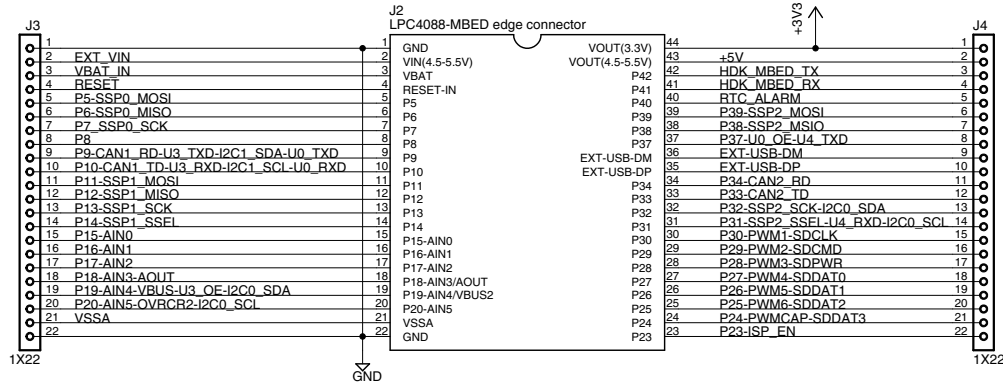
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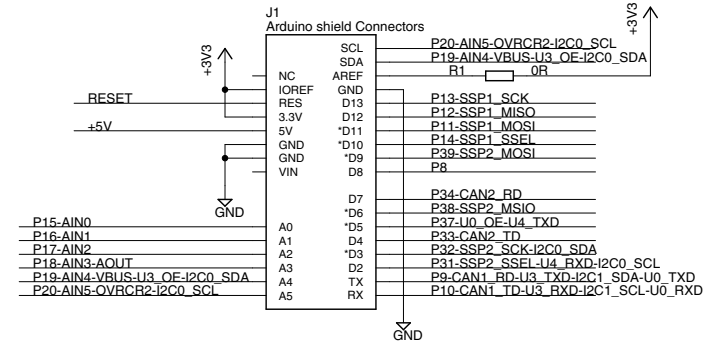
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mbed™ Compatible Pinning



Arduino™ Compatible Pinning

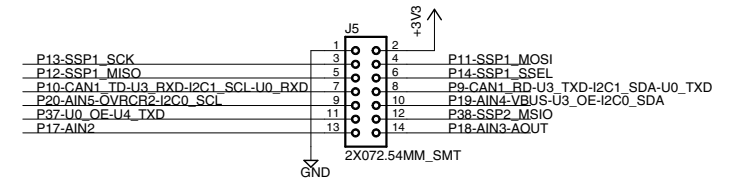


Arduino pin functionalities

A0: GPIO/AIN	D13: GPIO/SPI-SCK
A1: GPIO/AIN	D12: GPIO/SPI-MISO
A2: GPIO/AIN	D11: GPIO/PWM/SPI-MOSI
A3: GPIO/AIN	D10: GPIO/PWM/SPI-SSEL
A4: GPIO/AIN/I2C-SDA	D9: GPIO/PWM
A5: GPIO/AIN/I2C-SCL	D8: GPIO
	D7: GPIO
	D6: GPIO/PWM
	D5: GPIO/PWM
	D4: GPIO
	D3: GPIO/PWM
	D2: GPIO
	D1: GPIO/UART-TXD
	D0: GPIO/UART-RXD

Serial Expansion Connector

1: GND	2: VCC (3.3V, max 250mA)
3: SPI-SCK	4: SPI-MISO
5: SPI-MOSI	6: SPI-SSEL
7: UART-RX/GPIO	8: UART-TX/GPIO
9: I2C-SCL	10: I2C-SDA
11: GPIO	12: GPIO
13: AIN0/GPIO	14: AIN3/AOUT/GPIO



LPC1768 mbed	LPC4088 mbed
GND	GND
VIN (4-11V)	VIN (4.5-5.5V) Note reduced voltage range!
VBAT	VBAT
RESET	RESET
SPI1-MOSI	SSP0_MOSI
SPI-MISO SPI1-MISO	SSP0_MISO
SPI1-SCK	SSP0_SCK
GPIO	U4_OE / U4_CLK
UART1-TX/I2C1-SDA	CAN_RD_1 / U3_TXD / I2C1_SDA / U0_TXD
UART1-RX/I2C1-SCL	CAN_TD_1 / U3_RXD / I2C1_SCL / U0_RXD
SPI2-MOSI	I2S_TX_SDA / SSP1_MOSI / T2_MAT_3 / RTC_EV2 / CMP1_IN2
SPI2-MISO	I2S_TX_WS / SSP1_MISO / T2_MAT_2 / RTC_EV1 / CMP1_IN3
SPI2-SCK/UART2-TX	I2S_TX_SCK / SSP1_SCK / T2_MAT_1 / RTC_EV0 / CMP_VREF
UART2-RX	I2S_RX_SDA / SSP1_SSEL / T2_MAT_0 / U1_RTS / CMP_ROSC
AIN0	ADC0_IN[0] / I2S_RX_SCK / T3_CAP_0
AIN1	ADC0_IN[1] / I2S_RX_WS / T3_CAP_1
AIN2	ADC0_IN[2] / I2S_RX_SDA / U3_TXD
AIN3/AOUT	ADC0_IN[3] / DAC_OUT / U3_RXD
AIN4	USB_PWRD2 / USB_VBUS / ADC0_IN[4] / I2C0_SDA / U3_OE (Note: used by USB2 Device interface)
AIN5	USB_OVRCLR2n / ADC0_IN[5] / I2C0_SCL
	VSSA
	GND

LPC1768 mbed	LPC4088 mbed
VOUT 3.3V	VOUT 3.3V
VOUT 5V	VOUT 5V Note: not current limited!
NC	U0_TXD / U3_TXD
NC	U0_RXD / U3_RXD
ETH-RDN	RTC ALARM
ETH-RDP	SSP2_MOSI / T2_MAT_2
ETH-TDN	SSP2_MISO / T2_MAT_3
ETH-TDP	U0_OE / T3_MAT_3 / U4_TXD
USB-DM	EXT-USB2-DM
USB-DP	EXT-USB2-DP
CAN-RD	I2S_RX_SCK / CAN_RD_2 / T2_CAP_0 / CMP_ROSC
CAN-TD	I2S_RX_WS / CAN_TD_2 / T2_CAP_1 / CMP_RESET
UART3-TX/I2C2-SDA	SSP2_SCK / T3_MAT_2 / I2C0_SDA
UART3-RX/I2C2-SCL	SSP2_SSEL / U4_RXD / I2C0_SCL
PWMOUT0	SD_CLK / PWM0_1
PWMOUT1	SD_CMD / PWM0_2
PWMOUT2	SD_PWR / PWM0_3 / CMP1_IN1
PWMOUT3	SD_DAT_0 / PWM0_4 / CMP0_IN3
PWMOUT4	SD_DAT_1 / PWM0_5 / CMP1_IN0
PWMOUT5	SD_DAT_2 / PWM0_6
	SD_DAT_3 / PWM0_CAP_0 / CMP1_OUT
	ISP_EN / EINT_0 / NMI



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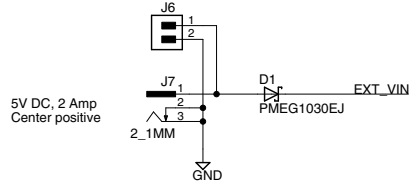
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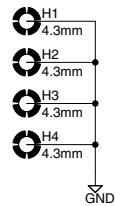
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uSD Interface and Power Supply Input

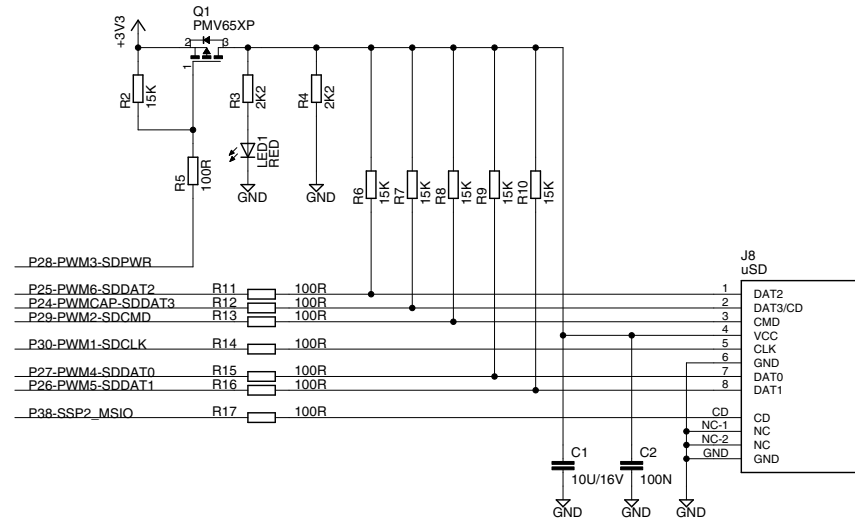
External +5V Supply



Mounting Holes



uSD Memory Card Interface



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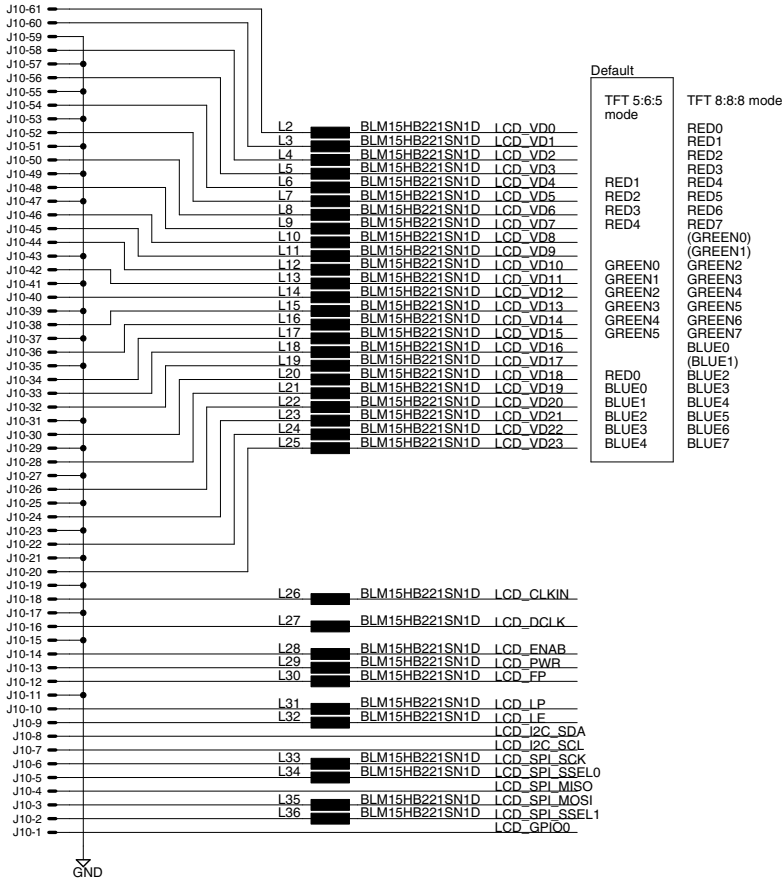
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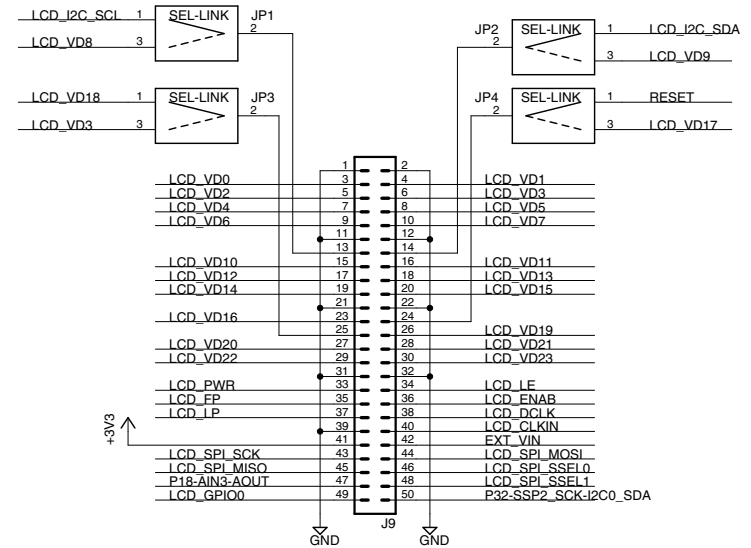
Display Expansion Connectors

Display Interface from LPC4088 QuickStart Board

FH26-61S-0.3SHW(05) or 5034256191



LCD Expansion Connector



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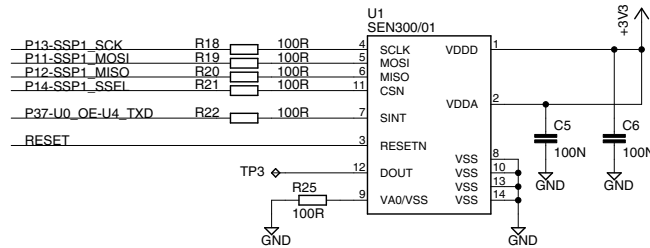
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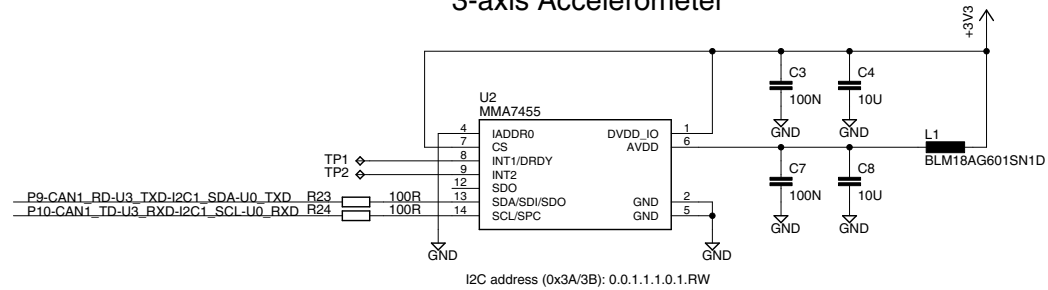
Sensors

Not mounted

SEN300 - Humidity, temperature and light sensor



3-axis Accelerometer



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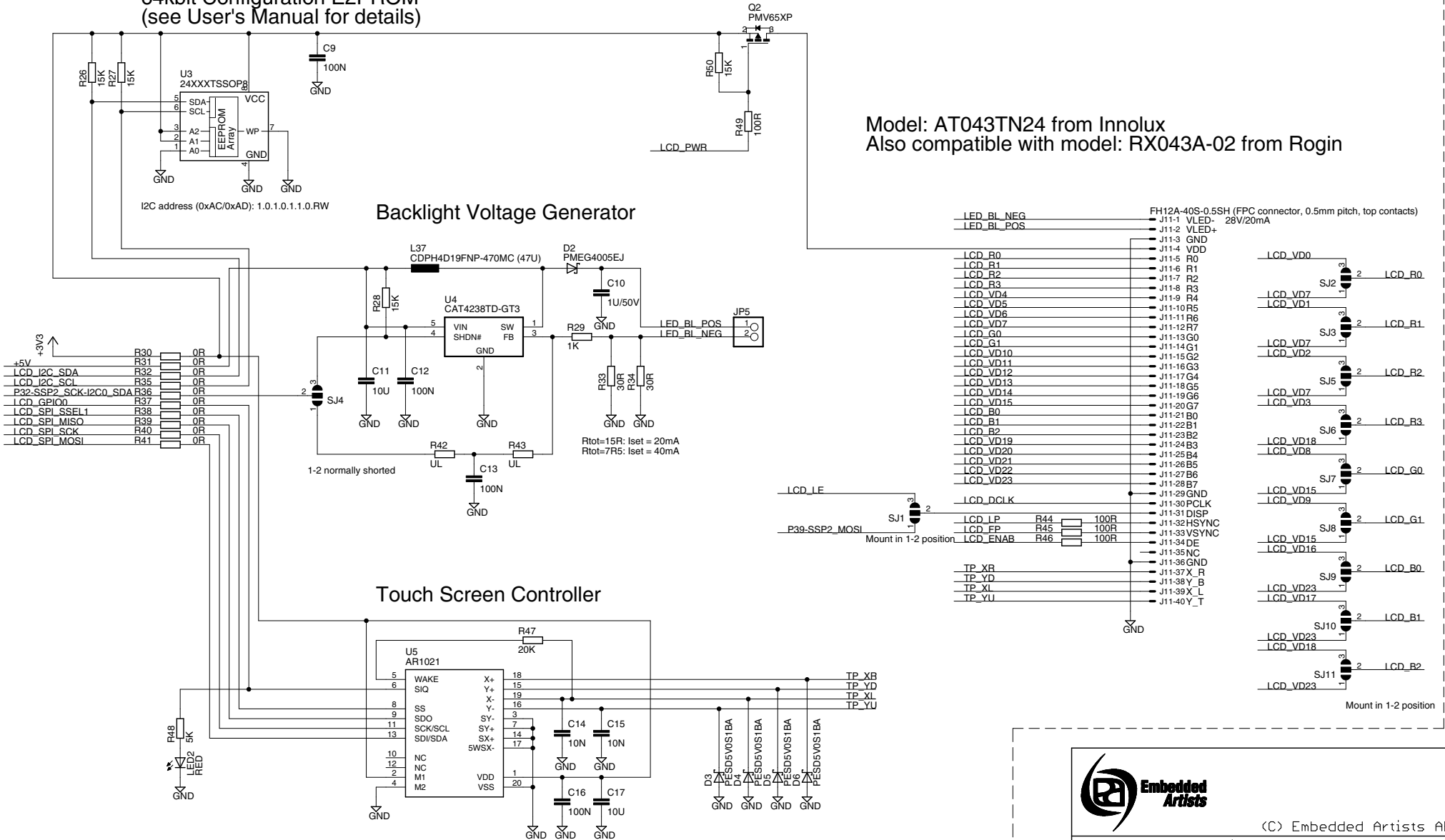
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4.3" 480x272 pixel LCD

Not mounted

64kbit Configuration E2PROM
(see User's Manual for details)

Model: AT043TN24 from Innolux
Also compatible with model: RX043A-02 from Rogin



LED_BL_NEG	J11-1 VLED-	FH12A-40S-0.5SH (FPC connector, 0.5mm pitch, top contacts)	J11-2 VLED+	28V/20mA
LED_BL_POS	J11-2 VLED+		J11-3 GND	
LCD_R0	J11-4 VDD		J11-4 VDD	
LCD_R1	J11-5 R0		J11-5 R0	
LCD_R2	J11-6 R1		J11-6 R1	
LCD_R3	J11-7 R2		J11-7 R2	
LCD_VD4	J11-8 R3		J11-8 R3	
LCD_VD5	J11-9 R4		J11-9 R4	
LCD_VD6	J11-10 R5		J11-10 R5	
LCD_VD7	J11-11 R6		J11-11 R6	
LCD_G0	J11-12 R7		J11-12 R7	
LCD_G1	J11-13 G0		J11-13 G0	
LCD_VD10	J11-14 G1		J11-14 G1	
LCD_VD11	J11-15 G2		J11-15 G2	
LCD_VD12	J11-16 G3		J11-16 G3	
LCD_VD13	J11-17 G4		J11-17 G4	
LCD_VD14	J11-18 G5		J11-18 G5	
LCD_VD15	J11-19 G6		J11-19 G6	
LCD_B0	J11-20 G7		J11-20 G7	
LCD_B1	J11-21 B0		J11-21 B0	
LCD_B2	J11-22 B1		J11-22 B1	
LCD_VD19	J11-23 B2		J11-23 B2	
LCD_VD20	J11-24 B3		J11-24 B3	
LCD_VD21	J11-25 B4		J11-25 B4	
LCD_VD22	J11-26 B5		J11-26 B5	
LCD_VD23	J11-27 B6		J11-27 B6	
LCD_IF	J11-28 B7		J11-28 B7	
LCD_DCLK	J11-29 GND		J11-29 GND	
LCD_LP	J11-30 PCLK		J11-30 PCLK	
LCD_FP	J11-31 DISP		J11-31 DISP	
LCD_ENAB	J11-32 HSYNC		J11-32 HSYNC	
	J11-33 VSYNC		J11-33 VSYNC	
	J11-34 DE		J11-34 DE	
	J11-35 NC		J11-35 NC	
TP_XR	J11-36 GND		J11-36 GND	
TP_YD	J11-37 X_R		J11-37 X_R	
TP_XL	J11-38 Y_B		J11-38 Y_B	
TP_YU	J11-39 X_L		J11-39 X_L	
	J11-40 Y_T		J11-40 Y_T	



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