

AZ DISPLAYS

SPECIFICATIONS FOR LIQUID CRYSTAL DISPLAY

CUSTOMER APPROVAL			
<p>Product: <u>AZDA20-KIT</u> PART NO. : <u>AZD-A20-1GN and AZD-43-5-7</u></p>			
APPROVAL		COMPANY	
CUSTOMER COMMENTS			
AZDISPLAYS ENGINEERING APPROVAL			
DESIGNED BY	CHECKED BY	APPROVED BY	

REVISION RECORD

REVISION	REVISION DATE	PAGE	CONTENTS
VER1.0	2015-09-20		FIRST ISSUE

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1. Hardware Specifications

SOC	AllWinner SOC A20, ARM® Cortex™-A7 Dual-Core , 1GHz, ARM® Mali 400 MP2 complies with OpenGL ES 2.0/1.1
Memory	1GB DDR3@480MHz (960MTPS)
Storage	NAND Flash, 4GB default, support TSD flash with SDIO interface
TF Card	Micro SD card slot, up to 32GB
SATA	Support 2.5 inch HDD/SSD up to 2TB
Ethernet	10M/100M RJ45
Display Output	4.3",5"& 7"TFT LCD (800x600 & 480x272 Resolution), HDMI Port A, HDMI V1.4a, support up to 1080P@60Hz resolution
Audio	Support 3.5mm jack for Audio output, Support 3.5mm jack for Line-In
LEDs	Power Led x 1, User Led x 2
Extended Output	RGB/LVDS for LCD, RTP, CTP, I2C, SPI, CSI/TS for camera, FM-IN, ADC, CVBS output, VGA, SPDIF-OUT, and more

2. Other Specification

Operating Temperature	-20°C~70°C
Environment Friendly	RoHS
Radio Standard:	FCC & CE compatible
Board Size	AZD-A20-1GB: 101mm(W) x 60mm(H) x 18mm(T) AZD-43-5-7: 100mm(W) x 59mm(H) x 10mm(T)

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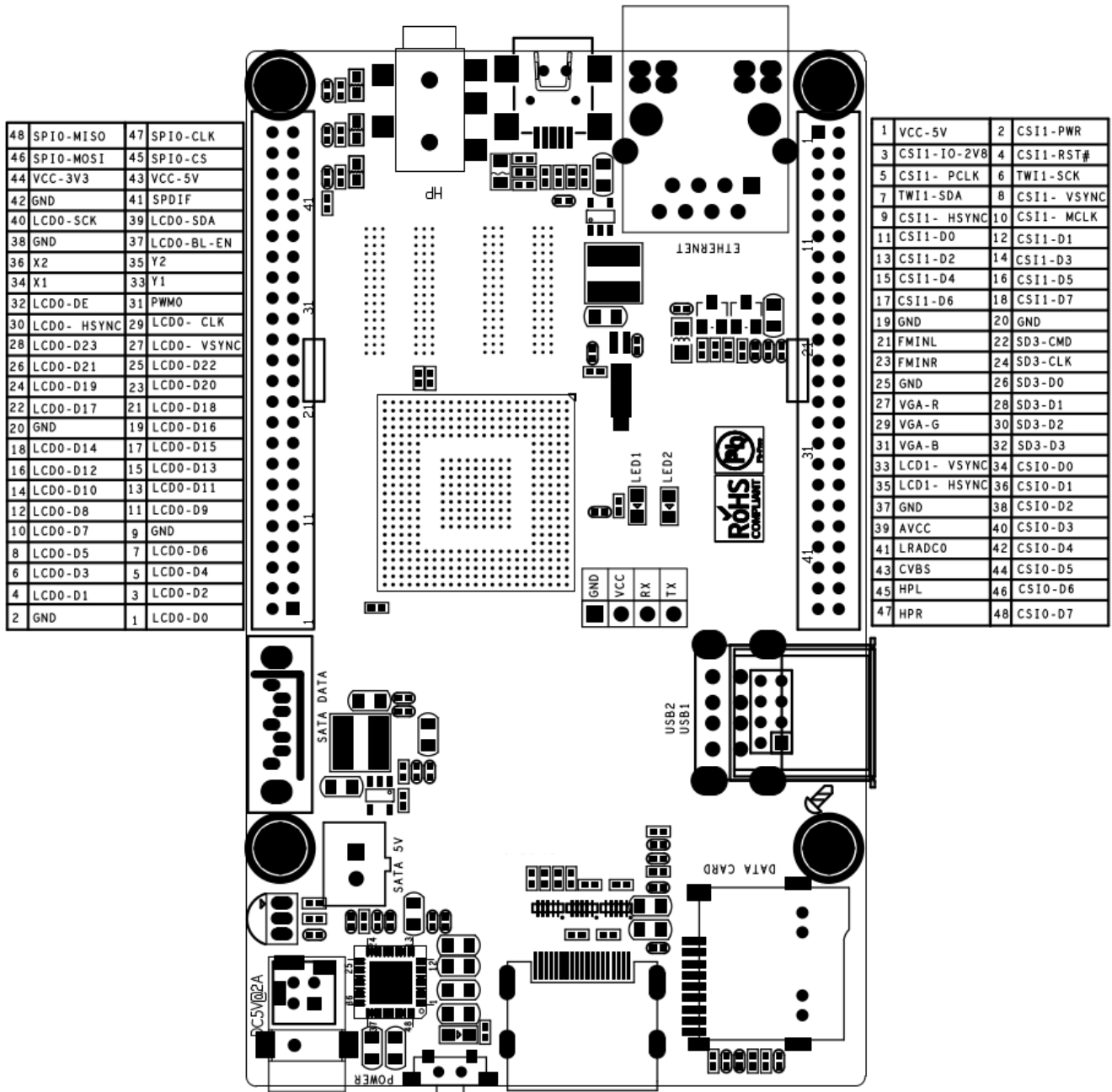
Packing Weight	210g
Packing Size	146mm(W) x 100mm(H) x 68mm(T)

3. GPIO Expansion Ports

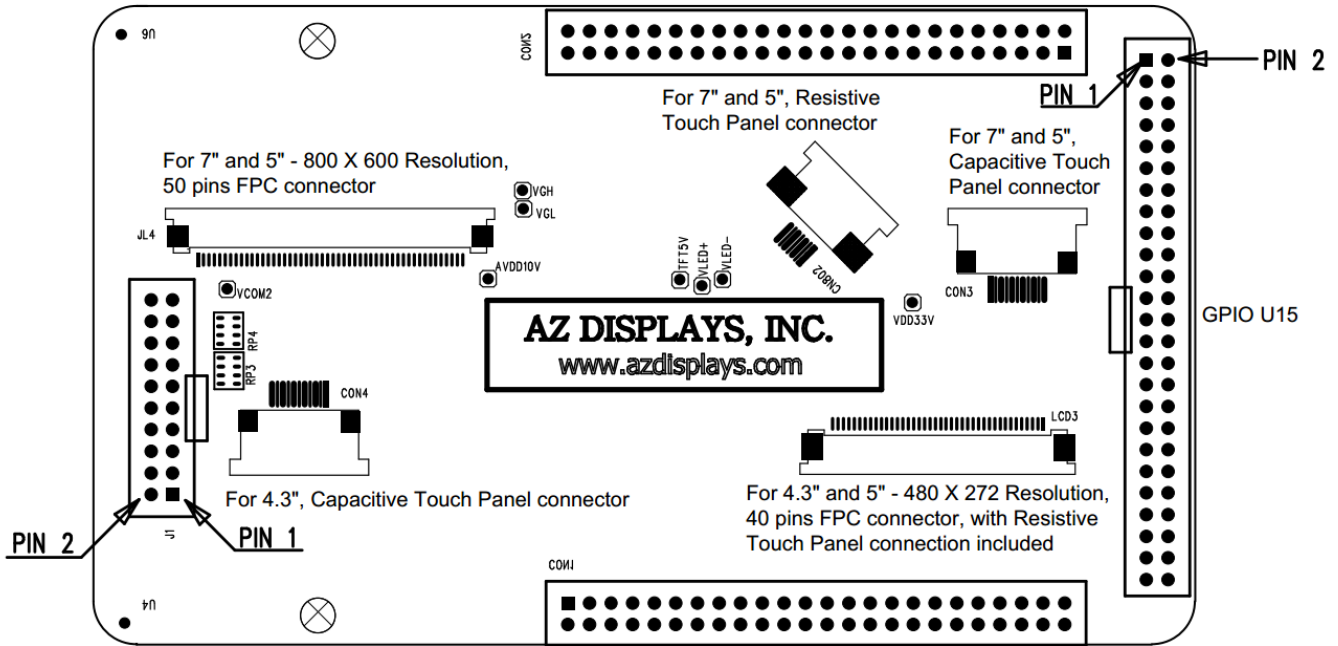
These tables shows the available expansion ports, their pin assignments and available functions. We have tried to only list those functions which makes sense, omitting details on functions where not all needed signals are exposed in the pin headers.

Note: Each pin is also GPIO capable even if not explicitly mentioned in the tables.

AZD-A20-1GB has two 2 x 24 2.0mm male headers.



AZD-A20-1GB has one 2 x 24 2.0mm male header (U15).



U14 (Next to SATA connector)			
LCD			
1	PD0 (LCDD0/LVDS0P0)	2	Ground
3	PD2 (LCDD2/LVDS0P1)	4	PD1 (LCDD1/LVDS0N0)
5	PD4 (LCDD4/LNVS0P2)	6	PD3 (LCDD3/LVDS0N1)
7	PD6 (LCDD6/LVDS0PC)	8	PD5 (LCDD5/LVDS0N2)
9	Ground	10	PD7 (LCDD7/LVDS0NC)
11	PD9 (LCDD9/LVDS0N3)	12	PD8 (LCDD8/LVDS0P3)
13	PD11 (LCDD11/LVDS1N0)	14	PD10 (LCDD10/LVDS1P0)
15	PD13 (LCDD13/LVDS1N1)	16	PD12 (LCDD12/LVDS1P1)
17	PD15 (LCDD15/LVDS1N2)	18	PD14 (LCDD14/LVDS1P2)
19	PD16 (LCDD16/LVDS1PC)	20	Ground

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21	PD18 (LCDD18/LVDS1P3)	22	PD17 (LCDD17/LVDS1NC)
23	PD20 (LCDD20)	24	PD19 (LCDD19/LVDS1N3)
25	PD22 (LCDD22)	26	PD21 (LCDD21)
27	PD27 (LCDVSYNC)-VGA-VSYNC	28	PD23 (LCDD23)
29	PD24 (LCDCLK)	30	PD26 (LCDHSYNC)-VGA-HSYNC
31	PB2 (PWM0)	32	PD25 (LCDDE)
33	YP_TP (TP-Y1)	34	XP_TP (TP-X1)
35	YN_TP (TP-Y2)	36	XN_TP (TP-X2)
37	PH7 (LCD0-BL-EN/LCD-PIO0/UART5-RX/EINT7)	38	Ground
39	PB11 (LCD0-SDA/LCD-PIO2)	40	PB10 (LCD0-SCK/LCD-PIO1)
41	SPDIF	42	Ground
43	VCC-5V	44	3.3V (<i>nc</i> in 2012-08-08)
SPI0			
45	PI10 (SPI0-CS/UART5-TX/EINT22)	46	PI12 (SPI0-MOSI/UART6-TX/EINT24)
47	PI11 (SPI0-CLK/UART5-RX/EINT23)	48	PI13 (SPI0-MISO/UART6-RX/EINT25)

U15 (Between Ethernet port and USB ports)			
CSI/TS			
1	VCC-5V	2	PH15 (CSI1-PWR/EINT15)
3	CSI1-IO-2V8	4	PH14 (CSI1-RST#/EINT14)
5	PG0 (CSI1-PCLK/SDC1-CMD)	6	PB18 (TWI1-SCK)
7	PB19 (TWI1-SDA)	8	PG3 (CSI1-VSYNC/SDC1-D1)
9	PG2 (CSI1-HSYNC/SDC1-D0)	10	PG1 (CSI1-MCLK/SDC1-CLK)

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11	PG4 (CSI1-D0/SDC1-D2)	12	PG5 (CSI1-D1/SDC1-D3)
13	PG6 (CSI1-D2/UART3-TX)	14	PG7 (CSI1-D3/UART3-RX)
15	PG8 (CSI1-D4/UART3-RTS)	16	PG9 (CSI1-D5/UART3-CTS)
17	PG10 (CSI1-D6/UART4-TX)	18	PG11 (CSI1-D7/UART4-RX)
19	Ground	20	Ground
Analog		SDIO3	
21	FMINL	22	PI4 (SDC3-CMD)
23	FMINR	24	PI5 (SDC3-CLK)
25	Ground	26	PI6 (SDC3-D0)
27	VGA-R	28	PI7 (SDC3-D1)
29	VGA-G	30	PI8 (SDC3-D2)
31	VGA-B	32	PI9 (SDC3-D3)
		CSI0/TS	
33	LCD1-VSYNC	34	PE4 (CSI0-D0)
35	LCD1-HSYNC	36	PE5 (CSI0-D1)
37	Ground	38	PE6 (CSI0-D2)
39	AVCC	40	PE7 (CSI0-D3)
41	LRADC0	42	PE8 (CSI0-D4)
43	CVBS	44	PE9 (CSI0-D5)
45	HPL	46	PE10 (CSI0-D6)
47	HPR	48	PE11 (CSI0-D7)