



IAC-IMX6-Kit Embedded Development Kit

# Hardware Manual

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CSI_D3P	41	42	NC
GND	43	44	ON/OFF
CSI_CLK0M	45	46	NC
CSI_CLK0P	47	48	NC
GND	49	50	NC
GND	51	52	NC
MLB_SP	53	54	NC
MLB_SN	55	56	NC
GND	57	58	NC
MLB_DP	59	60	NC
MLB_DN	61	62	NC
GND	63	64	NC
MLB_CP	65	66	NC
MLB_CN	67	68	NC
GND	69	70	NC
NC	71	72	NC
GND	73	74	GND
CSI1_D13	75	76	CSI1_PCLK
CSI1_D15	77	78	CSI1_D12
CSI1_D17	79	80	CSI1_D14
CSI1_D19	81	82	CSI1_D16
CSI1_D11	83	84	CSI1_D18
CSI1_D9	85	86	CSI1_D10
CSI1_D7	87	88	CSI1_D8
CSI1_D5	89	90	CSI1_D6
CSI1_D3	91	92	CSI1_D4

CSI1_D1	93	94	CSI1_D2
CSI1_DEN	95	96	CSI1_D0
CSI1_VS	97	98	CSI1_HS
GND	99	100	GND

**J4:CAN**

PIN	Signal Name
1	CANH1
2	CANL1
3	CANH2
4	CANL2
5	GND_CAN
6	GND_CAN

**J6:Serial Port 4/5**

Signal Name	PIN	PIN	Signal Name
J_RXD4	1	2	J_TXD4
J_RXD5	3	4	J_TXD5
GND	5	6	GND
J_485A4	7	8	J_485B4
J_485A5	9	10	J_485B5

**J7:Debug Port**

PIN	Signal Name
1	J_DRXD
2	J_DTXD
3	GND

## J9:LVDS (LVDS0)

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	+3.3VD
GND	3	4	GND
LVDS0_TXN0	5	6	LVDS0_TXP0
GND	7	8	GND
LVDS0_TXN1	9	10	LVDS0_TXP1
LVDS0_TXN2	11	12	LVDS0_TXP2
GND	13	14	GND
LVDS0_CLKN	15	16	LVDS0_CLKP
LVDS0_TXN3	17	18	LVDS0_TXP3
GPIO4_IO18	19	20	GPIO4_IO20

## J10:LVDS (LVDS1)

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	+3.3VD
GND	3	4	GND
LVDS1_TXN0	5	6	LVDS1_TXP0
GND	7	8	GND
LVDS1_TXN1	9	10	LVDS1_TXP1
LVDS1_TXN2	11	12	LVDS1_TXP2
GND	13	14	GND
LVDS1_CLKN	15	16	LVDS1_CLKP
LVDS1_TXN3	17	18	LVDS1_TXP3
GPIO4_IO21	19	20	GPIO4_IO23

## J11:Reserved Power Supply Interface

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PIN	Signal Name
1	+12.0VD
2	GND
3	+5.0VD
4	GND
5	+3.3VD
6	GND

**J12:Capacitive Touch Panel Interface**

PIN	Signal Name
1	+3.3VD
2	GND
3	I2C3_SDA
4	I2C3_SCL
5	GPIO4_IO25
6	GPIO4_IO27

**J14:USB**

PIN	Signal Name
1	GND
2	USBDN_DM4
3	USBDN_DP4
4	+3.3VD

**J16:2\*4GPIO**

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	GND
GPIO_4	3	4	GPIO_7

GPIO_8	5	6	GPIO_9
GPIO_16	7	8	GPIO_17
GPIO_18	9	10	GPIO_19

## J21:SDIO

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	GND
SYS_RSTN	3	4	SD2_DAT0
SD2_DAT3	5	6	SD2_CMD
SD2_DAT2	7	8	SD2_CLK
SD2_DAT1	9	10	NC

## J23:HDMI

PIN	Signal Name
1	HDMS_D2P
2	GND
3	HDMS_D2M
4	HDMS_D1P
5	GND
6	HDMS_D1M
7	HDMS_D0P
8	GND
9	HDMS_D0M
10	HDMS_CLKP
11	GND
12	HDMS_CLKM
13	HDMS_CEC_OUT

14	NC
15	DDC_CLK
16	DDC_DAT
17	GND
18	HDMI_5V
19	HP_DET

## J24:EIM

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	+3.3VD
EIM_AD15	3	4	EIM_AD14
EIM_AD13	5	6	EIM_WAIT
EIM_BCLK	7	8	EIM_D31
EIM_D30	9	10	EIM_D29
EIM_D28	11	12	EIM_D27
EIM_D26	13	14	EIM_D25
EIM_D24	15	16	EIM_D23
EIM_D22	17	18	EIM_D21
EIM_D20	19	20	EIM_D19
EIM_D18	21	22	EIM_D17
EIM_D16	23	24	EIM_CS1N
EIM_CS0N	25	26	EIM_WRN
EIM_LBA	27	28	EIM_OEN
GND	29	30	GND

## J25:CSI&amp;DSI

Signal Name	PIN	PIN	Signal Name
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CSI_D0M	1	2	+5.0VD
CSI_D0P	3	4	+5.0VD
GND	5	6	I2C2_SDA
CSI_D1M	7	8	I2C2_SCL
CSI_D1P	9	10	GPIO4_IO16
GND	11	12	GPIO4_IO19
CSI_D2M	13	14	GPIO4_IO17
CSI_D2P	15	16	DSI_D0M
GND	17	18	DSI_D0P
CSI_D3M	19	20	GND
CSI_D3P	21	22	DSI_CLK0M
GND	23	24	DSI_CLK0P
CSI_CLK0M	25	26	GND
CSI_CLK0P	27	28	DSI_D1M
GND	29	30	DSI_D1P

## J26:EIM

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	+3.3VD
+3.3VD	3	4	+3.3VD
CSI1_PCLK	5	6	CSI1_D13
CSI1_D12	7	8	CSI1_D15
CSI1_D14	9	10	CSI1_D17
CSI1_D16	11	12	CSI1_D19
CSI1_D18	13	14	CSI1_D11
CSI1_D10	15	16	CSI1_D9

CSI1_D8	17	18	CSI1_D7
CSI1_D6	19	20	CSI1_D5
CSI1_D4	21	22	CSI1_D3
CSI1_D2	23	24	CSI1_D1
CSI1_D0	25	26	CSI1_DEN
CSI1_HS	27	28	CSI1_VS
GND	29	30	GND

## J27:2\*4GPIO

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	GND
GPIO4_IO24	3	4	GPIO4_IO26
GPIO4_IO28	5	6	GPIO4_IO30
GPIO5_IO05	7	8	GPIO5_IO07
GPIO5_IO09	9	10	GPIO5_IO11

## J28:SATA

PIN	Signal Name
1	GND
2	SATA_TXP
3	SATA_TXM
4	GND
5	SATA_RXM
6	SATA_RXP
7	GND
8	GND_SATA
9	GND_SATA



## J29:MLB

Signal Name	PIN	PIN	Signal Name
+3.3VD	1	2	+3.3VD
MLB_SP	3	4	MLB_SN
MLB_DP	5	6	MLB_DN
MLB_CP	7	8	MLB_CN
GND	9	10	GND

## J30:SATA Power Supply Interface

PIN	Signal Name
1	+5.0VD
2	GND
3	GND
4	+12.0VD

## U19:MINI\_PCIE

Signal Name	PIN	PIN	Signal Name
Reserved	1	2	PCIE_3V3
Reserved	3	4	GND
Reserved	5	6	PCIE_1V5
Reserved	7	8	UIM_PWR
GND	9	10	UIM_DATA
PCIE_CLK1_N	11	12	UIM_CLK
PCIE_CLK1_P	13	14	UIM_RESET
GND	15	16	UIM_VPP
Reserved	17	18	GND

Reserved	19	20	GPIO5_IO19
GND	21	22	GPIO5_IO21
PCIE_RXM	23	24	PCIE_3V3
PCIE_RXP	25	26	GND
GND	27	28	PCIE_1V5
GND	29	30	I2C2_SCL
PCIE_TXM	31	32	I2C2_SDA
PCIE_TXP	33	34	GND
Reserved	35	36	USBDN_DM3
Reserved	37	38	USBDN_DP3
Reserved	39	40	GND
Reserved	41	42	LED_WWAN
Reserved	43	44	LED_WLAN
Reserved	45	46	LED_WPAN
Reserved	47	48	PCIE_1V5
Reserved	49	50	GND
Reserved	51	52	PCIE_3V3

## U20:SIM Card Interface

Signal Name	PIN	PIN	Signal Name
UIM_PWR	1	4	GND
UIM_RESET	2	5	UIM_VPP
UIM_CLK	3	6	UIM_DATA

## IV. Mainboard Function Illustration

Will be completed in later

## V. Structure & Size Chart



## VI. Software Description

IAC-IMX6-KIT provides the software support for Linux & Android.

The *IAC-IMX6-Kit Linux User Manual* will introduce the IAC-IMX6-Kit development kit's setting up and using in Linux . The detailed content could refer to the relative documentation.

## VII. Remark

1. Before connect to LCD, confirm LCD power specification.
2. Please use the original connecting accessories, avoid damaging the main board.
3. We ensure offering communication technology support through E-mail, telephone for lifelong technical support service.
4. We ensure offering 6 months repair service for free, if malfunction occurs in warranty because of quality problem, contact our retailer or our company with purchase receipt in warranty period, we will repair or replace it.
5. Under these circumstances, we do not offer repair for free:
  - Over warranty time;
  - Do not have purchase receipt;
  - Liquid inlet, Damp or Mold;
  - Malfunction and damage is not due to product quality but drops, intense sharking, arbitrarily modify, disoperation after purchase;
  - Damage of force majeure.
6. We reserve intellectual property for the software and hardware technical data of QY-IMX6S; users can only use them for teaching, testing, researching. Shall not be

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7. We accept batch order; we can offer technical support and service.



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