## **TINKER BOARD 2 Block Diagram** eMMC FLASH LPDDR4 1600MHz Channe0 LPDDR4 1600MHz Channe1 Mirco SD Card Conn **RK3399** LAN RTL8211F PHY 1000M RGMII **RJ45 Connector** M.2 connector (Key E) For Wi-Fi module U2\_HOST0 GPIO DC jack Power input 12V-19v/3A PWM 12V-19V to 5V I2C PMIC RK808 U3 X1 DP ALT USB 3.0 Type-C X1 **40PIN CON** I2C USB3.0 HUB GL3523 5 U3 X1 U3\_2 U3\_3 USB 3.0 Type-A X3 pin 27,28 SPI1 pin 19,21,23,24 SPDIF HDMI HDMI I2C pin 13,15,16,18 pin 8,10,11,36 MIPI TX x4 I2S0 MIPI DSI pin 12,22,29,31,35,38,40 MIPI RX x2 MIPI CSI PWM1 pin 33 PWM3A pin 26

5 4 3 2 1

## **I2C Block Diagram**

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note
I2C0	GPIO1_B7/SPI3_RXD/I2C0_SDA GPIO1_C0/SPI3_TXD/I2C0_SCL	PMUIO2	PMIC_I2C_SDA VCC_3V0 PMIC_I2C_SCL		Rockchip RK808-D	0x1b	PMIC
					FAN53555BUC23X	0xC0	DC-DC BUCK
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5	CSI_I2C_SDA CSI_I2C_SCL	VCC_3V0	MIPI_CSI		Camera
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2	RESERVE	VCC_3V0			
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4	HDMI_I2C_SDA HMDI_I2C_SCL	VCC_3V0			HDMI conn
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2	CC_I2C_SDA CC_I2C_SCL	VCC_3V0	Fairchild FUSB302B	0x44,0x46	USB-TypeC Mux
					FAN53555BUC23X	0xC0	DC-DC BUCK
I2C5	GPIO3_B3/MAC_CLK/I2C5_SCL GPIO3_B2/MAC_RXER/I2C5_SDA	APIO1	RESERVE	+3V_DUAL			
12C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2	40_I2C6_SDA 40_I2C6_SCL	VCC_3V0			GPIO 40 PIN
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2	40_I2C7_SDA 40_I2C7_SCL	VCC_3V0			GPIO 40 PIN
I2C8	GPIO1_C4/I2C8_SDA GPIO1_C5/I2C8_SCL	PMUIO2	EE_I2C_SDA EE_I2C_SCL	VCC_3V0	MIPI_DSI		Panel
					EEPROM		EEPROM

<Variant Name>

Title :									
ASUSTEK COMPUTER INC Engineer:									
Size	Project Name Tinker Board 2								
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