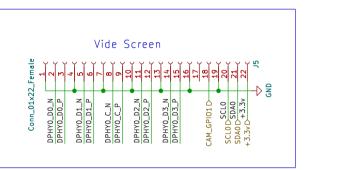


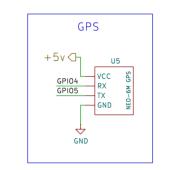
DC-DC power +5v @ 5A PSU (6.2v-28v Input)



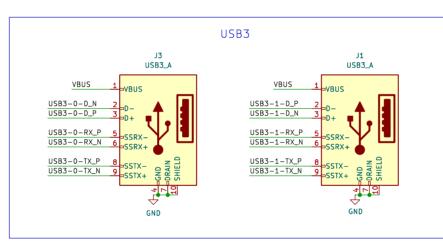
Boot mode

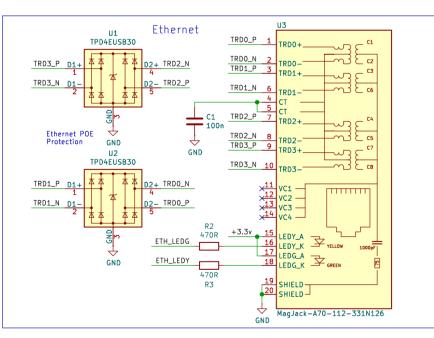
Довідка Л

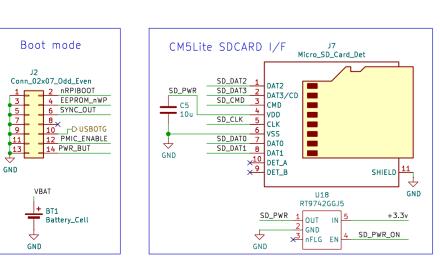
 Ins. Neopor.
 Himme i gara
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 Ins. Neugón.
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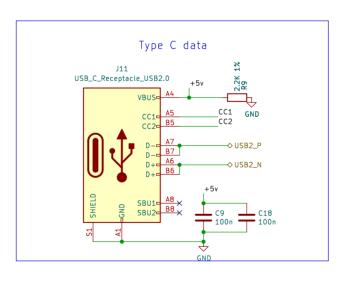


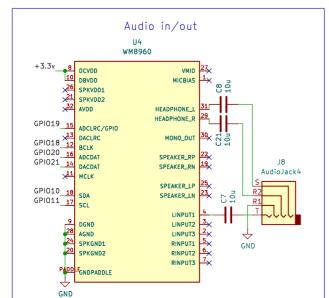
D4 D_Zener

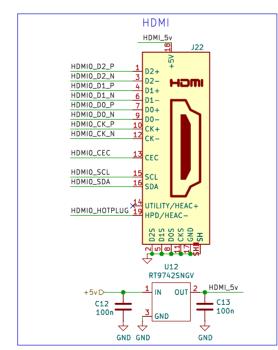


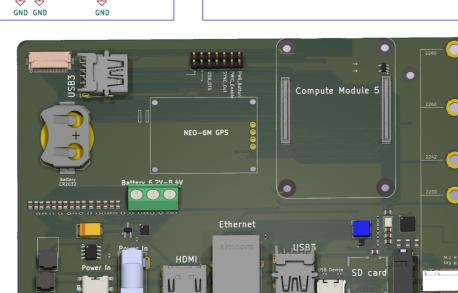












			Kasberry	/ Pi Computer Mo	dete 5	
	Module: ComputeModul	e5-CM5				Module1B mputeModule5-CM5
TRD1_P	GND 4	GND	TRD3_P	PCIE_nCLKREQD-	102 PCIe_nCLKREQ	USB_OTG_ID 101 USBOTG
TRD1_N	Ethernet_Pair1_P Ethernet_Pair1_N	Ethernet_Pair3_P Ethernet_Pair3_N		PCIE_nWAKE D	TOT DOLD THANK	USB2_N 103
	8 CND	GND 7		PCIE_PWR_EN <		USB2_P 105 → USB2_P 107
1100_11	Fthernet Pair() N	Ethernet_Pair2_N	TRD2_N			GND
TRD0_P	12	Etharnat Dair 2 D	1 TRD2_P	PCIE_CLK_P ()	110 PCIe_CLK_P 112 PCIe_CLK_N	PCIE_IRSI
TACHO	Ethernet_PairO_P	GND 1:	5 ETH_LEDY	PCIE_CLK_N ()		VBUS_EN 111 VBUS_EN 1113 GND
1710110	TO EVN TYCHO	ETHELHECHTED3(3.34)	7 ETH_LEDG	PCIE_RX_P D	110 DCI- DV D	MIDIO DO N. 115 DPHYO_DO_N
		Ethernet_nleb2(3.3v)	9 PWM	PCIE_RX_ND		MIPIO DO P 117 DPHTO_DO_P
	EEPROM_nWP	FAN PWM		-		GND 119
		LED_nACT 2: GND	3	PCIE_TX_P <	122 DCIn TV D	MIPIO_D1_N 121
			5 GPI021	PCIE_TX_N 🔾		MIPIO_D1_P
		GPI020 2	7 GPI020	USB3-0-RX_N	126 GND 128 USB3-0-RX_N	GIND 427 T DBUYO C N
		GPIUIO	9 GPI016 1 GPI012	USB3-0-RX_P		MIPIO_C_N 129 DPHYO_C_P
		GPI012			IJZ CND	GND 131 DPHYO D2 N
000	GND 34 GPI05 38 ID_SD	GND 3	5 ID_SC DID CC	USB3-0-D_P	134 Luchz A D D	MIPIO D2 N 133 D11110_D2_N
SD GPI011	38 cpica 4	ID_5C -	7 GPI07 DID_SC	USB3-0-D_N	115B3_0_D N	MIPIO D2 P 135 DPHY0_D2_P
GPI09			9 GPI08	USB3-0-TX_N		GND 137 DPHY0_D3_N
		10 GPI025	1 GPI025	USB3-0-TX_N USB3-0-TX_P	140 USB3-0-TX_N	MIPIO_U3_N
		GND 4	<u>3</u>	0303-0-1721	USB3-0-TX_P	MIPIO_U3_P HDMI4 HOTE
		enol GPI024 4	5 GPI024	HDMI1_D2_P	146 148 HDMI1_TX2_P	HDMI1_HOTPLUG
		-1001A1RLF GPI023	7 GPI023 9 GPI018	HDMI1_D2_N	148 HDMI1_TX2_N	HDMI1_SDA HDMI1_SCL
					CND	High Speed Serial HDMI1 CFC 149 HDMI1_CEC
GP104	54 GND	GPI015 5: GND 5:		HDMI1_D1_P	152 HDMI1 TX1 P	HDMIO CEC 151 HDMIO_CEC
		GND 5	5 GPI014	HDMI1_D1_N	154 HDMI1 TX1 N	HDMIO HOTPLUG 153 HDMIO_HOTP
		SD CLK	7 SD_CLK	HDMI1 DO P	156 158 HDM14 TVO B	GND 155 USB3-1-RX
		GND 5	9	HDMI1_DO_N	158 HDMI1_TX0_P	USB3-1-RX_N 150 USB3 1 DV
		CD DATZ 6	1 SD_DAT3		160 162 GND	USB3-1-RX_P
>	54 SD_CMD 64 SD_DAT5 66 GND	SD DATO 6.	3 SD_DATO	HDMI1_CK_P	104 LIDMIA CLE D	GND 101 USB3-1-D_P
+	GND GND	GND 🖰	5 SD_DAT1	HDMI1_CK_N	166	USB3-1-D_N 165 USB3-1-D_
>	68 SD_DAT4 NB SD signals are	only available SD_DAT1	9 SD_DAT2	_	GND	GND 167
>	SD_DAT7 on modules wi	thout emmc SD_DATZ	1	HDMI0_D2_P	1/0 LIDNIO TVO D	USB3-1-TX N 169 USB3-1-TX
ľ	SD_DAI4 NB SD signals are SD_DAT7 on modules wi Z2 SD_DAT6 GND	GND 7 7. SD_VDD_Override	3.	HDMI0_D2_N	172 HDMI0_TX2_N	USB3-1-TX_P
VBAT	VRAT	SD_PWR_ON	SD_PWR_ON	HDMIO_D1_P	GND	GND 173 DPHY1_DO_N
		1 5 1 (laguet) 7	7 +5v	HDMIO_D1_N	HDMIU_IXI_P	MIPI1_DO_N
	801 0010	+5v_(Input)	9		180 CND	MIPI1_DO_P 177 DPH11_DO_P 179 GND
DAO (1 3 3)	SDA0	+5v_(Input)	1	HDMI0_D0_P	182 LIDNIA TVA D	MIDIA DA N 181 DPHY1_D1_N
3.3v ()	+3.3v (Output) 600mA Max	+5v_(Input)	5	HDMI0_D0_N		MIPI1 D1 P 183 DPHY1_D1_P
+1.8v	86 88 +3.3v_(Output)	+5v_(Input) 7 +5v_(Input) 8 +5v_(Input) 8 +5v_(Input) 8 +5v_(Input) 8	7	IIDAIO CK B	CND	GND 185
	88 +1.8v_(Output) 600mA Max 90 +1.8v_(Output)	+5v_(Input) 80 WiFi_nDisable	<u>5</u>	HDMIO_CK_P HDMIO_CK_N	HDMIO_CLK_P	MIPI1_C_N 187 DPHY1_C_N
		BT nDisable	\mathbb{C}	HDMIO_CK_N	190 HDMIO_CLK_N	MIPI1_C_P
		BT_nDisable 9: nRPIBOOT 9: LED_nPWR 9:	<u>\$</u>	DPHY1_D3_N	192 GND	GNU TOT T DRUVE DO N
		LED_nPWR 9	<u>\$</u>	DPHY1_D3_P	194 MIPI1_D3_N 196 MIPI1_D3_P	MIPII_UZ_N DDUV4_DD D
		CAM CPION P	<u>√</u>			MIPI1_02_P
CAM_GPI01 <	GND CAM_GPI01	PMIC_ENABLE 9	¾	HDMI0_SCL	HDMIO_SCL	HDMIO_SDA 199 HDMIO_SDA
\downarrow			$\dot{\uparrow}$	GND		GND
GNI	D		GND	GND		GND

M2.77
M2_3v3 지수의적 위한인건 Bus_M.2_Socket_M
PCIE_nRSTD 50 PERST
PCIE_TX_ND
PCIE_RX_P
31 PETP1 NC 32 NC 32 PETP1 NC 30
A PERP2 NC 29 A PERP2 NC 29 → PETP2 NC 24
17 PET'n2 NC 22 NC 20 NC
× ⁴ PERn3 NC
DAS/DSS/LED1 10 100n M2_3v3 GND
60 4 M U7
28 DEVSLP PEDET 69 32.768KHZ
SUSCLK 68 Q
PCIE_CLK_PD 55 REFCLKp GND2260 M2
Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
end → → → → → → → → → → → → → → → → → → →
U8 AP3441SHE-78 FB 1 FB SGND 17 L1 PCIE_PWR_EN
+5vD+5v 3 VIN LX 6 2.2UH M2_3v3
100K FB 4.7nF 10K 1% 10U 10K 1%
GND GND GND GND GND GND GND GND
GŇD

M2

Reference	Value	Part Description
BT1	Battery_Cell	Battery Retainer Coin, 20.0mm 1 Cell SMD (SMT) Tab
C1,C9,C10,C12,C13,C18, C19,C57,C58	100n	0.1uF 10% 16V Ceramic Capacitor X7R 0402 (1005 Metric)
C5,C6,C7,C8,C14,C21,C47, C49,C51,C54,C55,C56,C62, C63,C64,C65,C66,C67	10u	10uF 10% 10V Ceramic Capacitor X7R 0805 (2012 Metric)
C11	4.7nF	4.7nF capacitor 0402
C20	100uF	Capacitor, SP-Cap, 100u, 6.3V, 15mR ESR
C34,C37,C39	10u 35v	10uF 10% or 20% 35V Ceramic Capacitor X6S 0805 (2012 Metric)
C36	100n 100v	0.1uF 10% 100V Ceramic Capacitor X5R 0402 (1005 Metric)
C59,C61	nf	220 pF, 50 V, 0402 [1005 Metric], ± 5%, C0G / NP0/CH, GCM Series
C60	1.2nF	1200pF 10% 10V Ceramic Capacitor X5R 0402 (1005 Metric)
D4,D5,D6	D_Zener	
J1,J3	USB3_A	
J2	Conn_02x07_Odd_E ven	PinHeader_2x07_P2.54mm_Vertical
J4	Bus_M.2_Socket_M	M.2 M Key connector
J5	Conn_01x22_Female	22 Position FFC, FPC Connector Contacts, Bottom 0.020" (0.50mm) Surface Mount, Right Angle
J6	USB_C_Receptacle_ USB2.0 14P	
Ј7	Micro_SD_Card_Det	9 (8 + 1) Position Card Connector microSD TM Surface Mount, Right Angle Gold
Ј8	AudioJack4	
J11	USB_C_Receptacle_ USB2.0	USBC USB2 data and power connector
J19	Barrel Jack	DC Power Connectors PCB 2.1MM
J22	690-019-298-412	HDMI Connector, Right Angle, 19 Contacts, Receptacle, Surface Mount, Surface Mount Right Angle
L1	2.2uH	Inductor, SMT, 2520, 2u2, IRMS=7A, ISAT=8A, DCR=0.032R
L5,L6	SRN6045TA-3R3Y	3.3µH Semi-Shielded Wirewound Inductor 7.8A 21mOhm Nonstandard
Module1	ComputeModule5- CM5	100 Position Connector Receptacle, Center Strip Contacts Surface Mount Gold
R2,R3	470R	Resistor 470R M1005 1% 63mW
R9,R16,R28	2.2K 1%	Resistor 2.2K M1005 1% 63mW
R10,R22,R23,R24,R30,R31	10R	Resistor 10R M1005 1% 63mW
R14	100K	Resistor 100K M1005 1% 63mW
R15	10K 1%	Resistor 10K M1005 1% 63mW
R25	20K 1%	Resistor 20K M1005 1% 63mW
R27	12K 1%	Resistor 12K M1005 1% 63mW
R34,R35,R37,R38,R39	12K	Resistor 12K M1005 1% 63mW
U1,U2	TPD4EUSB30	Quad TVS diode for high speed signals (USB3, GigE etc.)
U3	MagJack-A70-112- 331N126	Gigabit Ethernet Magjack
U4	WM8960	
U5	NEO-6M GPS	
U7	32.768KHZ	32KHz Xtal oscilator
U8	AP3441SHE-7B	3A DC-DC converter
U10	BK-18650-PC4	
U11	BK-18650-PC4	Power Switch/Driver 1:1 N-Channel 500mA
U12	RT9742SNGV	SOT-23-3 Buck Switching Regulator IC Positive Adjustable
U16	AP64501SP-13	0.8V 1 Output 5A 8-SOIC (0.154", 3.90mm Width) Exposed Pad
U17	IP2326	
U18	RT9742GGJ5	Power Switch/Driver 1:1 N-Channel 1A TSOT-23- 5
	1	·

Reference

Value

Part Description

					Електрична	грична схема						
						Літ.		П	Maca		Масштаб	
Змін.	Арк.	№докум.	Підп.	Дата		П		П				
Розр	об.				title	П		- 1				
Перев.					Ш							
Т.кон	пр.					Арк.		1	П	Аркуші	в 1	
						Г						
Н.контр.						КПІ, ПБФ			Φ			
Затв.												