


Cyborg\_TGL-H RTX\_IO Board

2020/07/28  
REV : SA

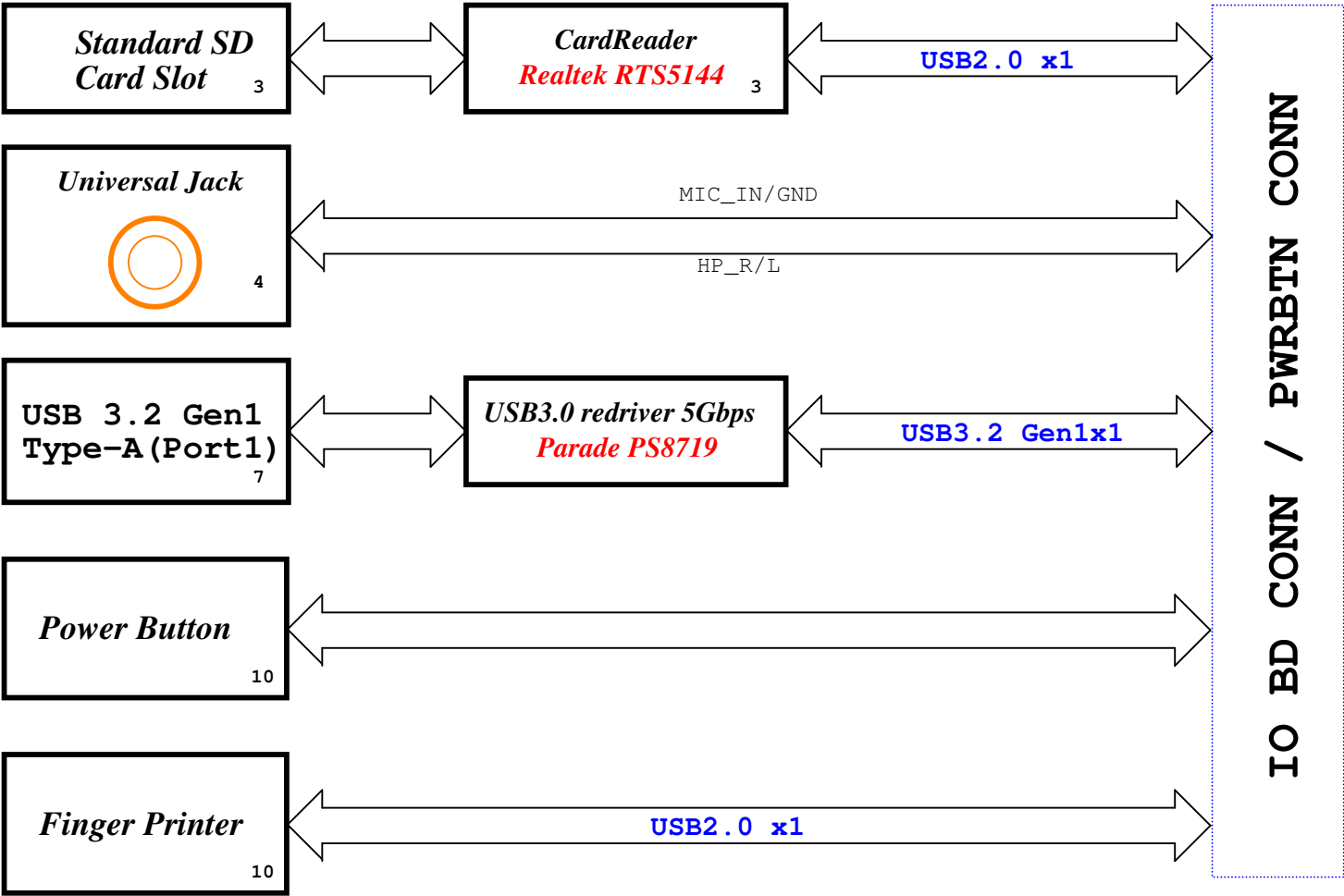
DY :None Installed

Cyborg TGL H IO


		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title <b>Cover Page</b>		
Size A4	Document Number <b>Cyborg_IO_Board</b>	Rev <b>SA</b>
Date: Thursday, October 22, 2020		Sheet 1 of 11

# Cyborg\_TGL-H RTX\_IO Board Block Diagram

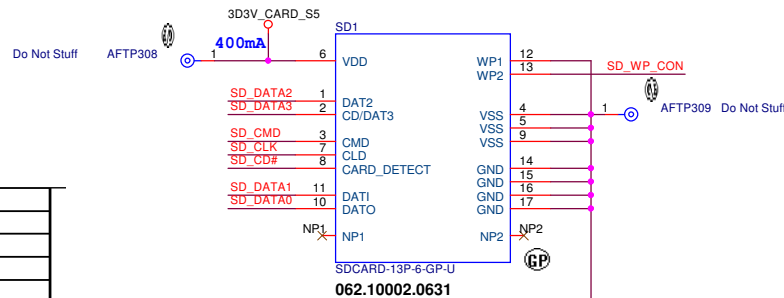
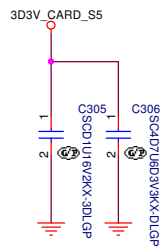
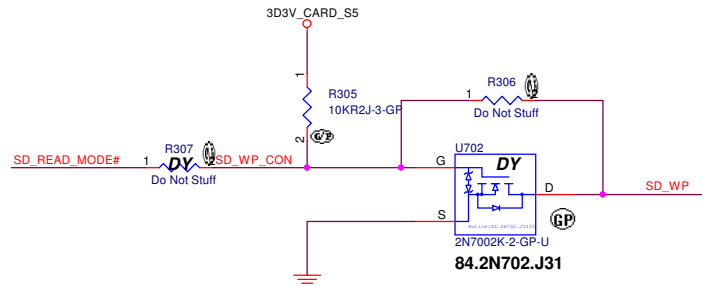
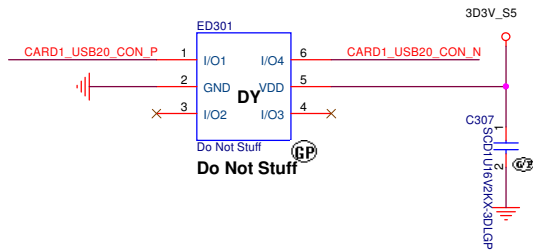
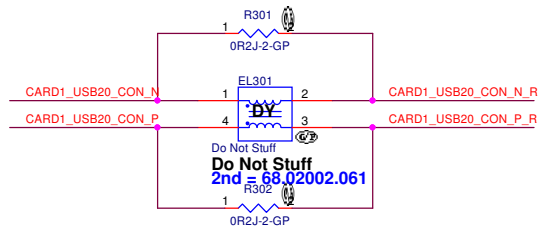
Project code : QRQY00001063  
PCB P/N :  
Revision : SA



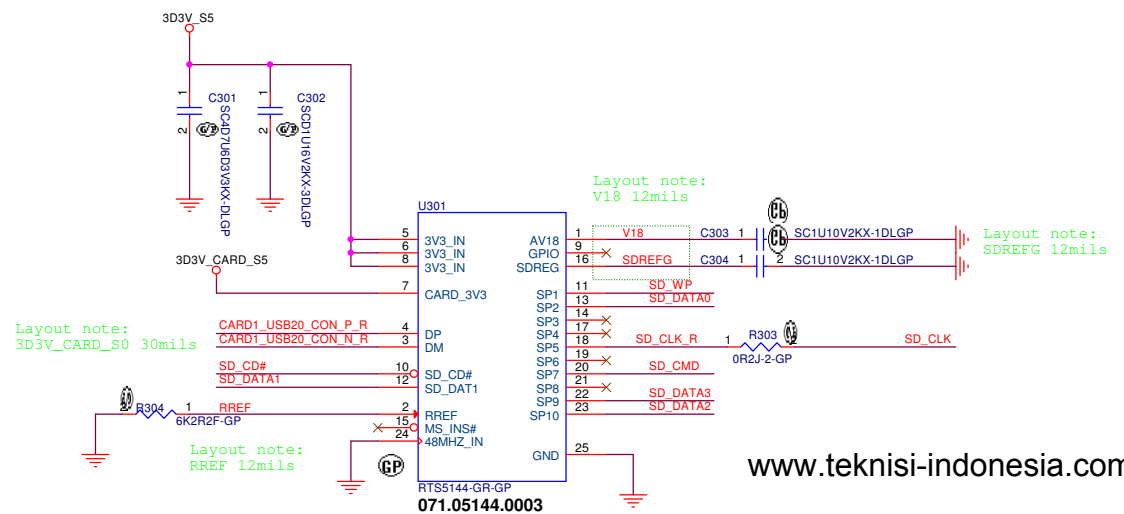
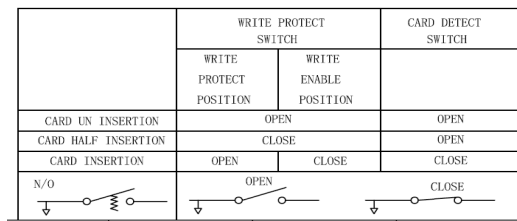
Cyborg TGL H IO

		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>Title</b> <b>Block Diagram</b>			
<b>Size</b> A4	<b>Document Number</b> <b>Cyborg_IO_Board</b>		<b>Rev</b> <b>SA</b>
<b>Date:</b> Thursday, October 22, 2020		<b>Sheet</b> 2 <b>of</b> 11	

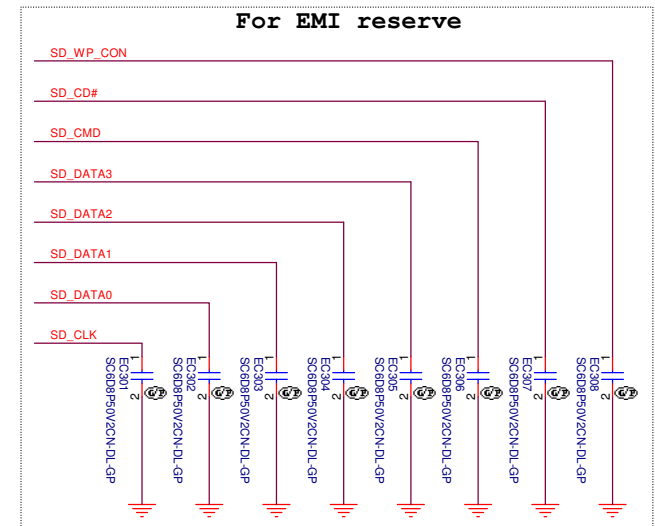
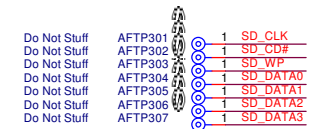
**Main Func = Card Reader**



NO.	PIN #	FUNCTION
1	#9	DAT2
2	#1	CD/DAT3
3	#2	CMD
4	#3-1	VSS
5	#3-2	VSS
6	#4	VDD
7	#5	CLD
8	CD	CARD DETECT
9	#6	VSS
10	#7	DATO
11	#8	DATI
12	WP1	WRITE PROTECT(VSS)
13	WP2	WRITE PROTECT(VDD)
14	FRAME	GND
15	FRAME	GND
16	FRAME	GND
17	FRAME	GND



www.teknisi-indonesia.com



Cyborg TGL H 10



**Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

Title

### **Card Reader-RTS5144**

Size

Document Number

## Cyborg\_IO\_Board

ev

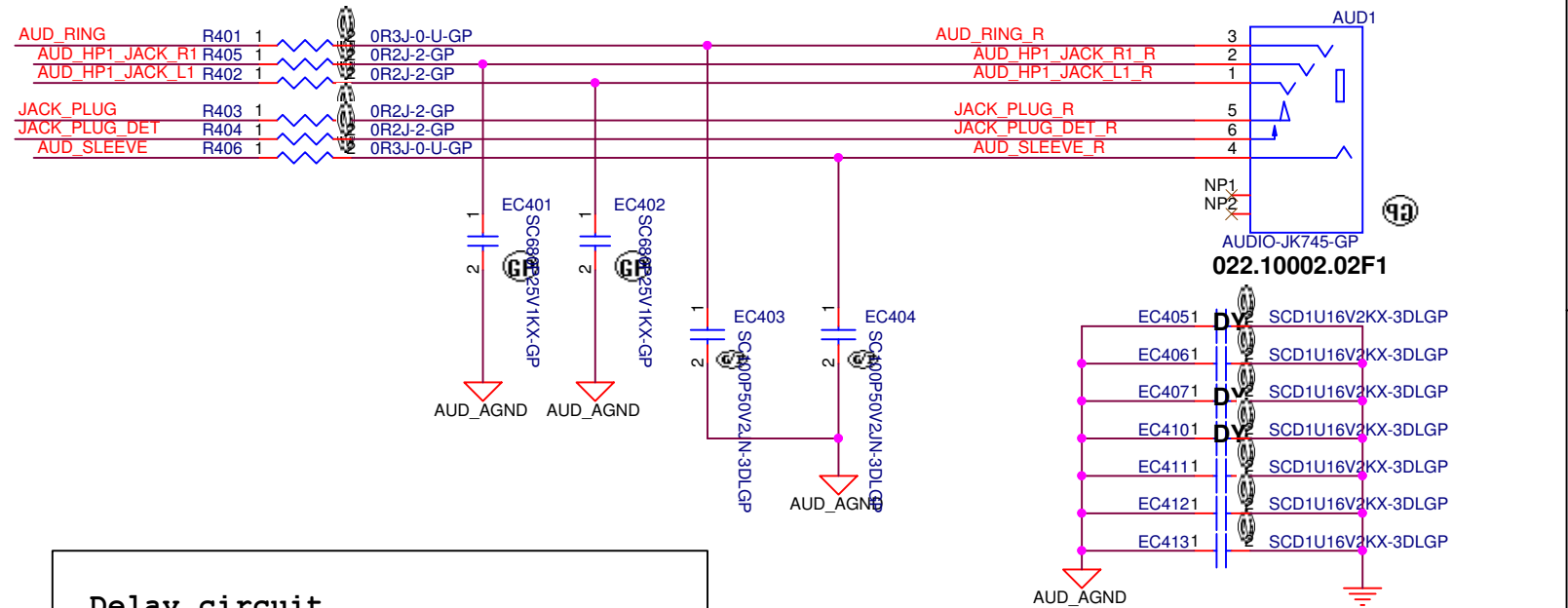
Date: Thursday, October 22, 2020

Sheet 3 of 11

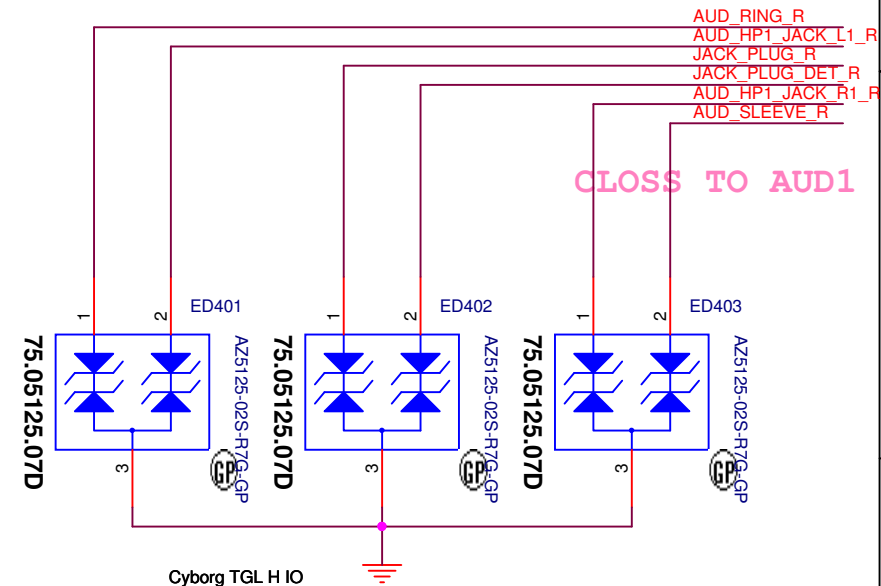
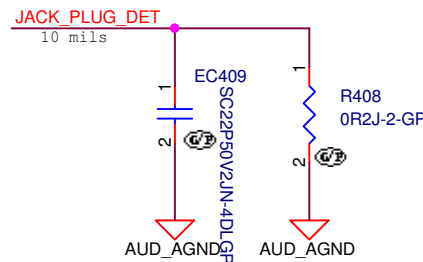
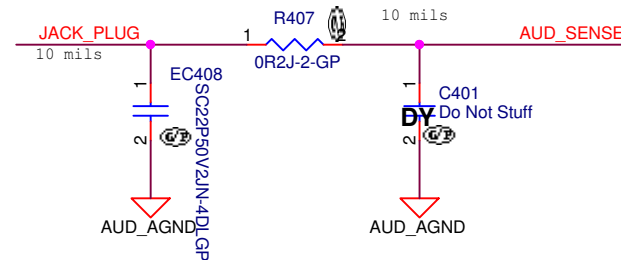
1

# SSID = Audio IO

[9] AUD\_RING <<< \_\_\_\_\_  
 [9] AUD\_SLEEVE <<< \_\_\_\_\_  
 [9] AUD\_SENSE <<< \_\_\_\_\_  
 [9] AUD\_HP1\_JACK\_L1 >>> \_\_\_\_\_  
 [9] AUD\_HP1\_JACK\_R1 >>> \_\_\_\_\_



## Delay circuit



Cyborg TGL H IO



**Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title					<b>AUD IO</b>					
Size		Document Number				Rev				
A4		<b>Cyborg_IO_Board</b>				<b>SA</b>				
Date:		Wednesday, November 04, 2020			Sheet 4		of		11	



IO connect

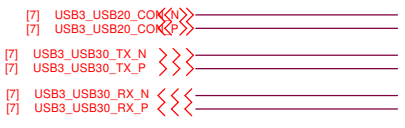
Card Reader



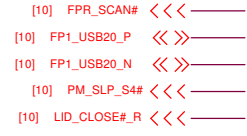
Audio



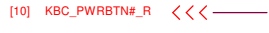
USB3.0



Finger Print



Power Button

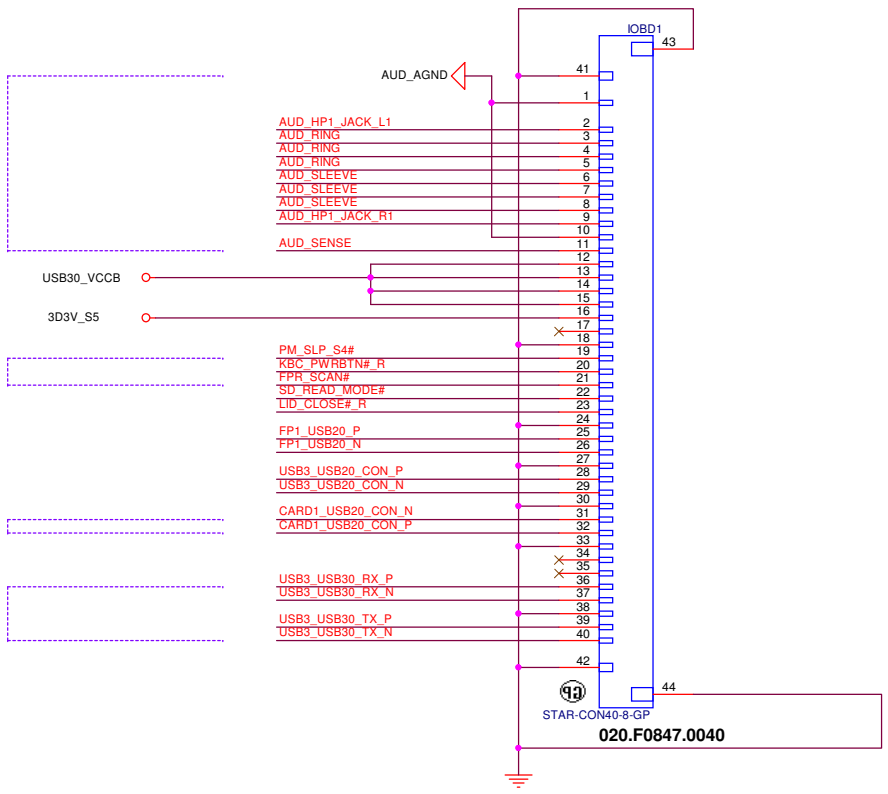


AUDIO

FINGER PRINTER

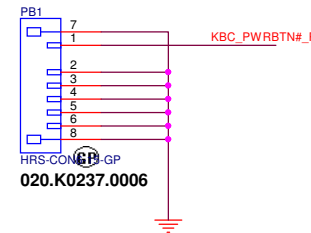
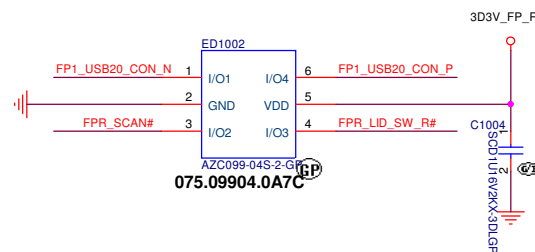
Card Reader

USB3.2 Gen2 Port1



[9] KBC\_PWRBTN#\_R <<< —

[9] LID\_CLOSE#\_R <<< —



C272 FRP Pin Definition				
Applied Platforms: Moon Knight / Watchman / Cyborg				
Pin num	Pin Name	Pin Type	Description	Map
1	VDD_3.3V	Power	Connect to 3.3V system power. Need to keep power on Moon Standby state for Wake-up function. Active Low.	Host → FRP
2	SIO_0MHz	Input	EC to pull down this pin when the system is in S3, S4 or S5 (if the SIO divider is required just need to pull down this pin when the system is in S3, and host needs to keep FRP power on S3). *2: If SIO divider is required, EC needs to pull down this pin when the system is in S4, S5, and host needs to keep FRP power in S4, S5, and S5. Active Low.	EC → FRP
3	USB_0M	IOB	USB D-	FRP ↔ USB Bus
4	USB_DP	IOB	USB D+	FRP ↔ USB Bus
5	Ground	Ground	Signal ground. Connect to ground.	System M/B Ground
6	LD_Case01	IOB	EC detects LD close when output low to FRP. EC should output high to LD conditions, except to output low when LED is closed. Active Low.	EC → FRP
7	FRP_SCAN (Power Shielding)	Output	If active, FRP can ignore the power fault for authentication. After shielding being pulled for authentication. FRP can ignore any power pull up/floatting in S0/S3/S4/S5 State.	FRP → EC
8	Ground	Ground	Signal ground. Connect to ground.	System M/B Ground


Title			
<b><i>Finger Print</i></b>			
Size A3	Document Number	<b><i>Cyborg_IO_Board</i></b>	Rev <b><i>SA</i></b>
Date: Thursday, October 22, 2020		Sheet 10 of	11

# Change History

Version	Date	Page	Change Description
			2020/07/29 EMC Hebe Peng command 1. EC401,EC402 change cap 680pF 2. JACK_PLUG,JACK_PLUG_DET add cap 22p 3. ED401~ED406 chande TVS:75.05125.07D 4. ED701 change TVS:075.01043.0073 5. USB2_USB20_CON_P,USB2_USB20_CON_N add CMC:068.09002.2001 6. EL1001: DY 7. FP1_USB20_CON_N,FP1_USB20_CON_P change:075.09904.0A7C 8. FPR_SCAN#,FPR_LID_SW_R# change:075.09904.0A7C 9. CARD1_USB20_P,CARD1_USB20_N TVS:075.09904.0A7C  2020/07/29 EE Paul PC Wang Modify U701 Change to 071.08719.0B03  2020/07/30 EMC Hebe Peng command 1. ED301 DY 2. Page 4. ADD 4 cap (78.10421.2FLDL). 3. USB2_USB30_TX_CMC_N, USB2_USB30_TX_CMC_P add CMC:68.24500.201(DY) USB2_USB30_RX_CMC_N, USB2_USB30_RX_CMC_P add CMC:68.24500.201(DY) USB3_USB20_P, USB3_USB20_N add CMC:68.01012.2011(DY)  2020/08/13 change USB Audio connectr for EVT  2020/08/25change net name change EL703 pn 068.01012.2011  2020/08/26 Swap pin CARD1_USB20_CON_P_R、CARD1_USB20_CON_N_R USB3_USB20_CON_P_R、USB3_USB20_CON_N_R FP1_USB20_CON_P、FP1_USB20_CON_N  2020/09/24 Audio connector change pn 022.10002.0T51 to 022.10002.02F1  2020/10/14 DY U702 DVR1006 Stuff R306  2020/10/21 AUD1 PN change to 022.10002.02F1 USB1 PN change to 022.10005.0PG1 Add D1002

www.teknisi-indonesia.com

Cyborg TGL H IO

		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
<b>Change Note</b>			
Size A4	Document Number <b>Cyborg_IO_Board</b>		Rev <b>SA</b>
Date: Thursday, October 22, 2020		Sheet 11	of 11