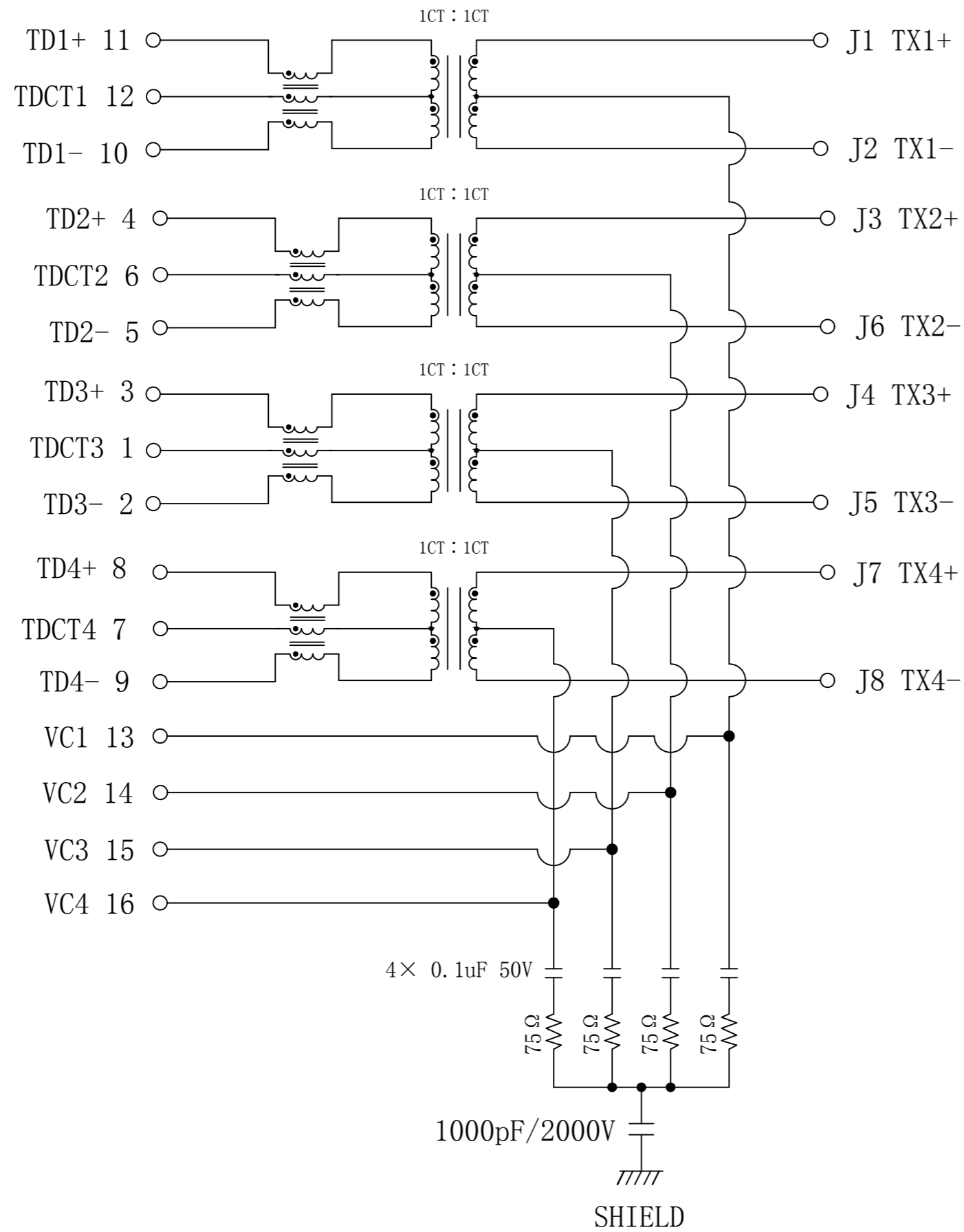


# Schematic:

REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-19	

PC BOARD CONNECTIONS

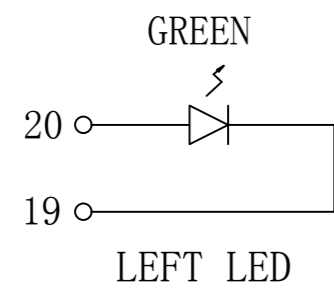


RJ45 CONNECTOR

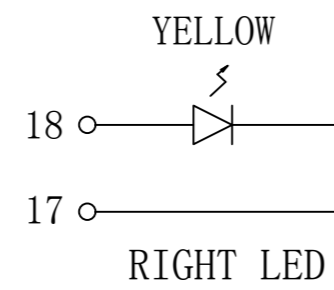
## ELECTRICAL SPECIFICATIONS @25°C

- Turn Ratio( $\pm 2\%$ ):  
Pri:Sec = 1CT:1CT
- Inductance OCL:  
120uH Min @100KHz 0.1V 8mA
- Insertion Loss:  
-1.5dB Max @1-250MHz  
-3.0dB Max @250-500MHz
- Return Loss:  
-18dB Min @1-40MHz  
-14dB Min @40-100MHz  
-11dB Min @100-250MHz  
-8dB Min @250-500MHz
- Cross talk:  
-30dB Min @1-100MHz  
-20dB Min @100-500MHz
- Common Mode Rejection Ratio:  
-28dB Min @1-100MHz  
-22dB Min @100-250MHz  
-20dB Min @250-500MHz
- Balance DC Line current:  
1000mA Max @57VDC Continuous.
- Isolation PHY SIDE To Line SIDE : 1500Vrms
- Operating Temperature Range: 0°C to +70°C.

Emitting Color	$\lambda_p$ (nm)	V <sub>F</sub> @I <sub>F</sub> =20mA	I <sub>R</sub> @V <sub>R</sub> =5V
GREEN	565	1.8~2.6V	10 $\mu$ A max
YELLOW	585	1.8~2.6V	10 $\mu$ A max



LED POLARITY		COLOR
PIN 19	PIN 20	
-	+	GREEN



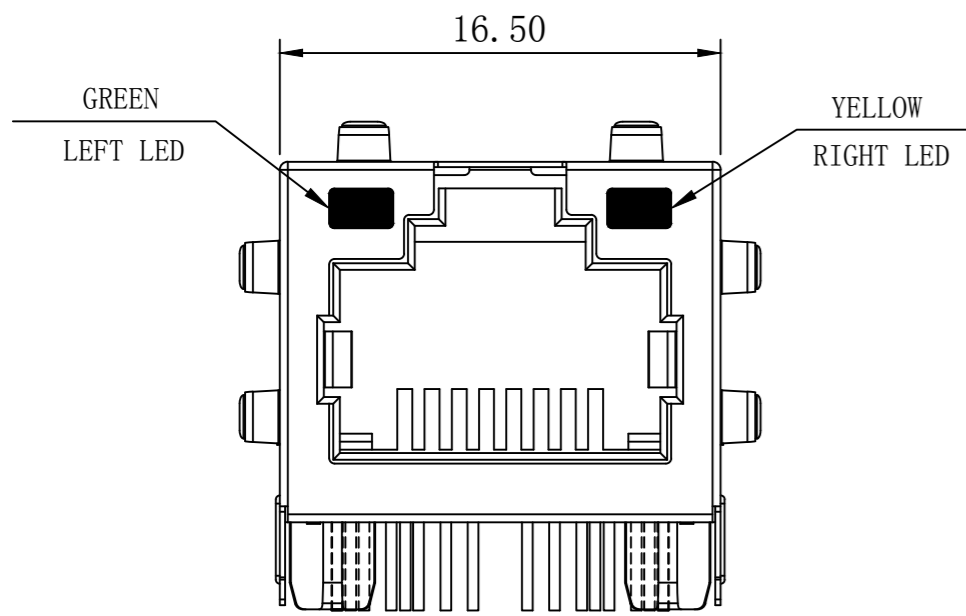
LED POLARITY		COLOR
PIN 17	PIN 18	
-	+	YELLOW



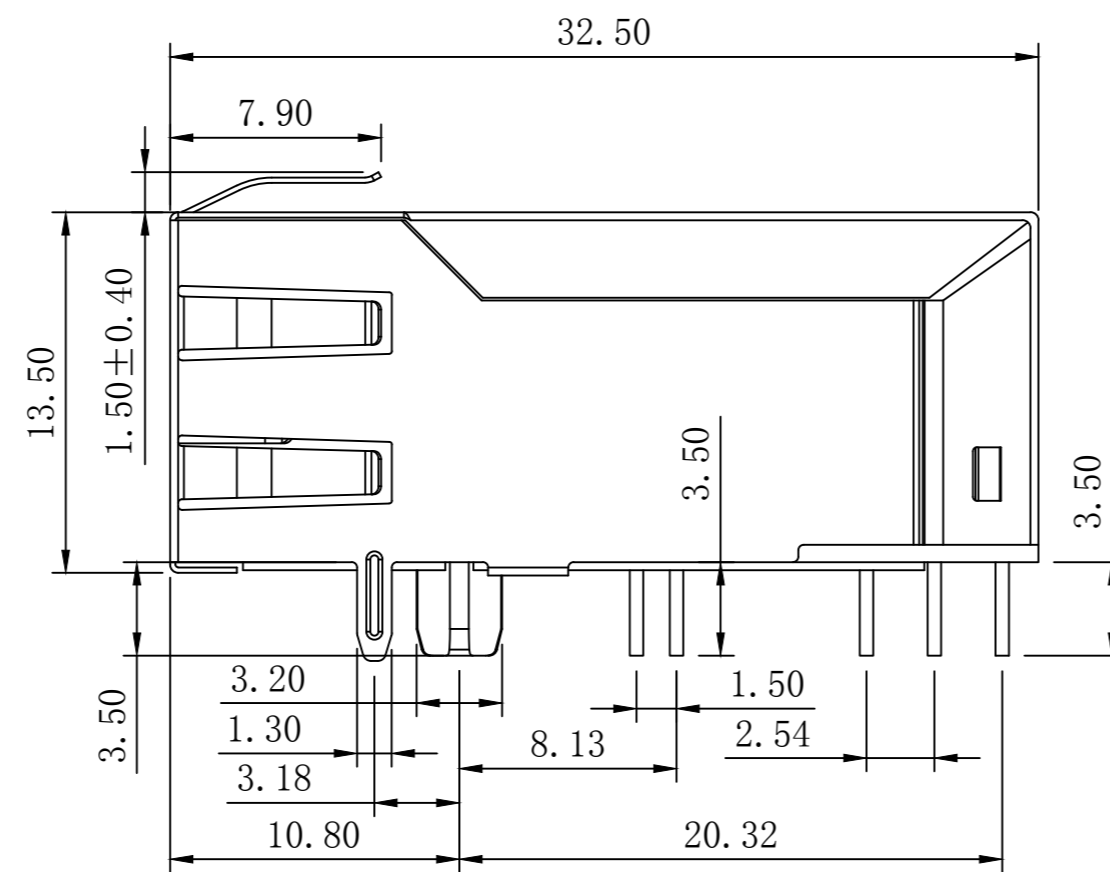
X:X $\pm 0.30$	APPD: TOM	LINK-PP INT'L TECHNOLOGY CO., LIMITED
X:XX $\pm 0.25$	CHKD: JAMES	
X:XXX $\pm 0.05$	DR: LEO	TITLE: RJ45 Connector with 10G Base-T Integrated Magnetics For PoE++ Application
ANGLES $\pm 1^\circ$	UNIT: mm	PART NO.: LPJMP95282AHNL
	SCALE: 2/1	SHEET: 1/2
	REV: A6	DWG NO.: LP23031946

# Mechanical :

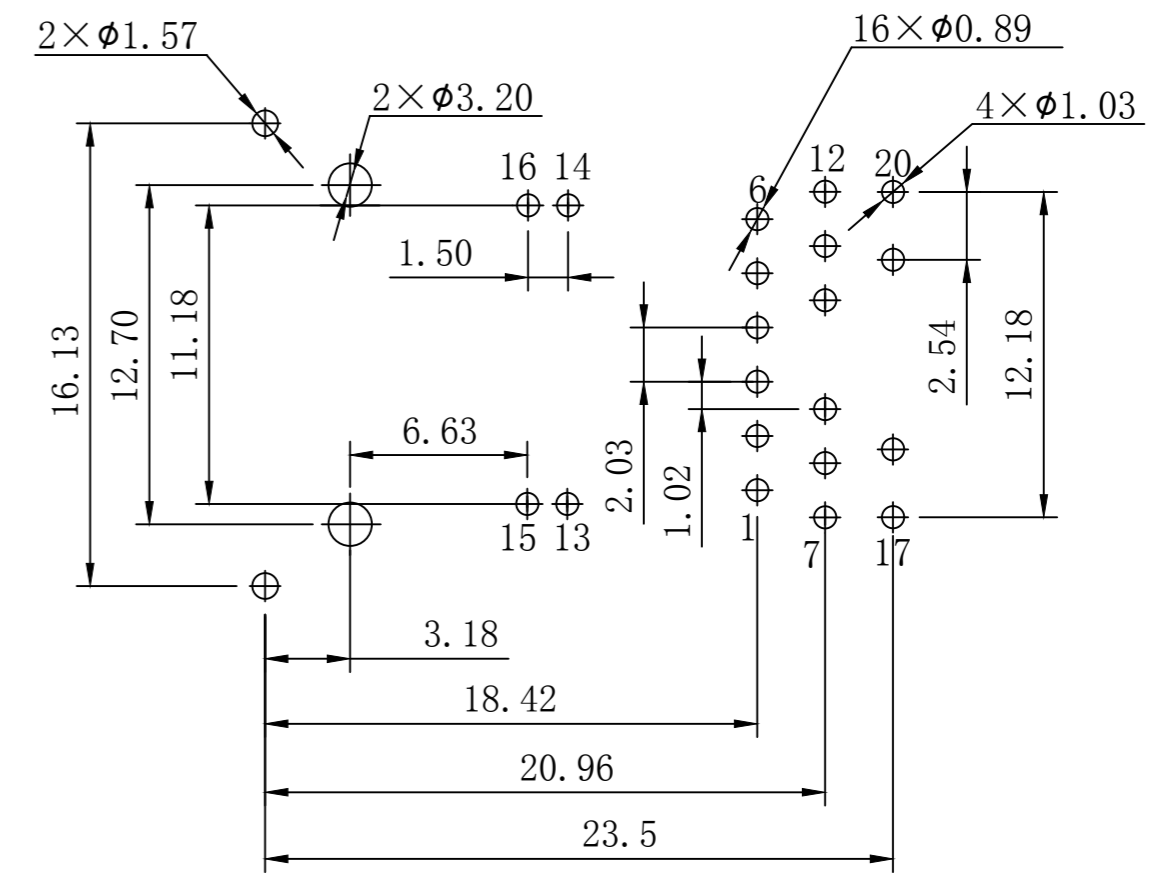
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A6	REL		2023-03-19	



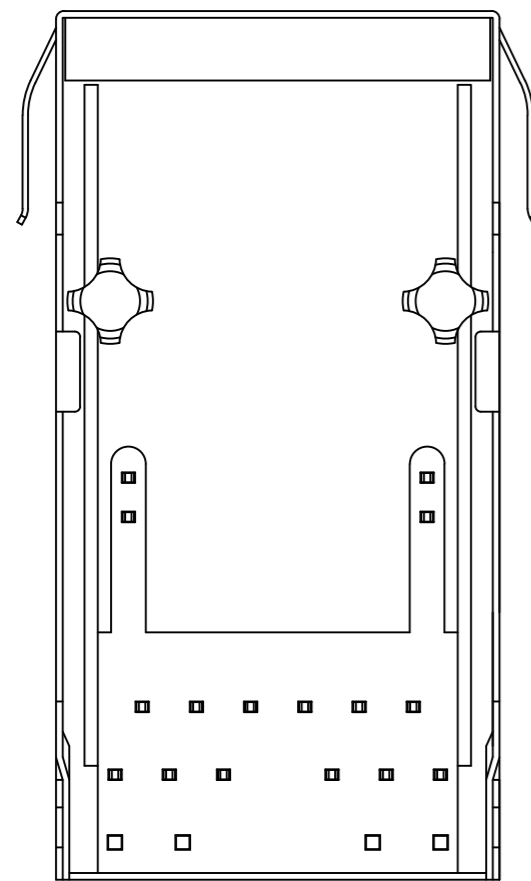
Front Side View



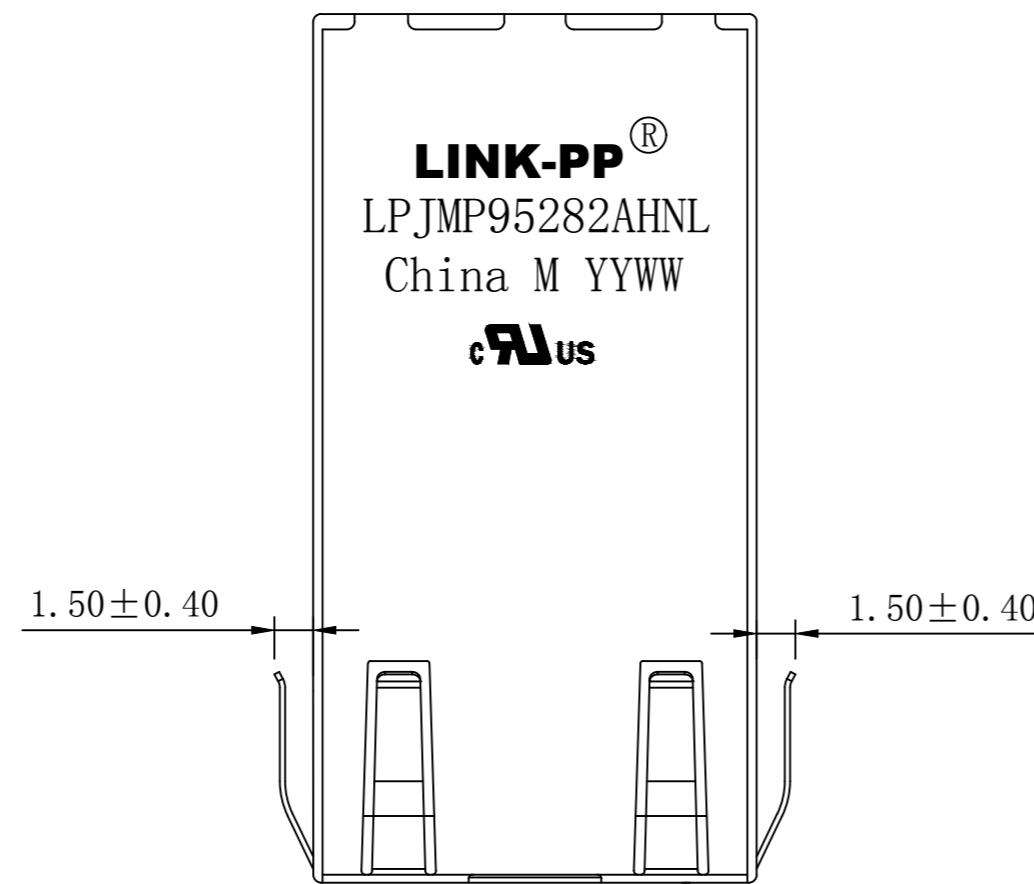
Left Side View



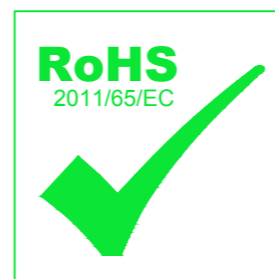
Suggested PCB Layout (Top View)



Bottom Side View



Top Side View



### NOTES:

1. Designed to support application, such as SOHO (ADSL modems), LAN-on-Motherboard (LOM), hub and Switches.
2. Meets IEEE 802.3bt specification with up to 140W
3. Connector Materials:  
 Housing Material: Thermoplastic PBT+30%G.F UL94V-0  
 Contact Material: Phosphor Bronze C5210R-EH Thickness=0.35mm  
 Pins: Brass C2680R-H Thickness=0.35mm  
 Shield: SUS 304 1/2EH Thickness=0.2mm  
 Contact plating: Gold 6 micro-inches min. In contact area.
4. Wave solder tip temperature: 250°C, 5 Sec.
5. UL Certification: File Number E484635.

X:X ±0.30	APPD: TOM	LINK-PP INT'L TECHNOLOGY CO., LIMITED
X:XX ±0.25	CHKD: JAMES	
X:XXX ±0.05	DR: LEO	TITLE: RJ45 Connector with 10G Base-T Integrated Magnetics For PoE++ Application
ANGLES ±1°	UNIT: mm	PART NO.: LPJMP95282AHNL
	SCALE: 2/1	SHEET: 2/2
	REV: A6	DWG NO.: LP23031946