

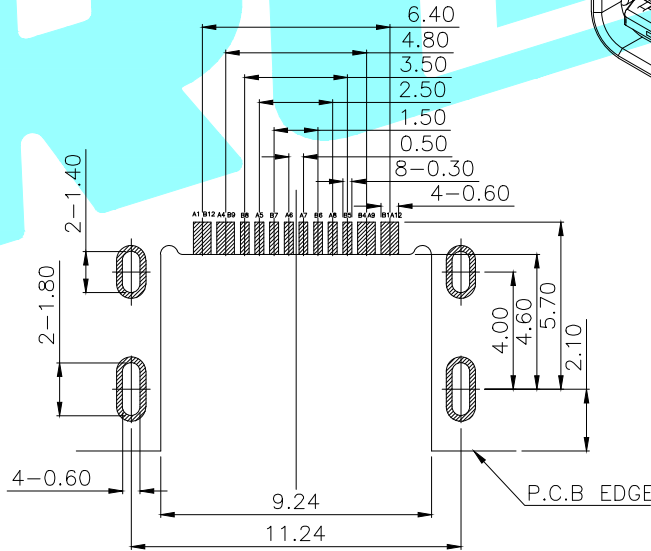
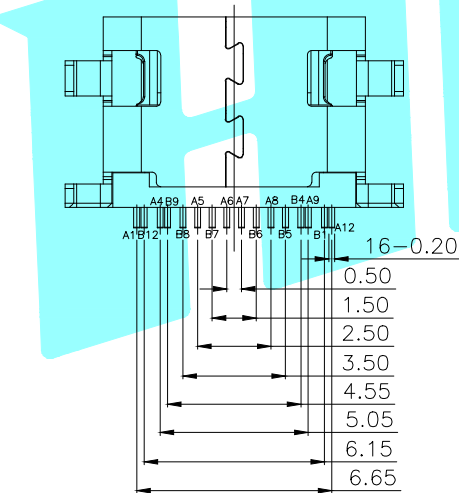
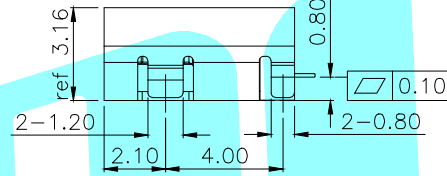
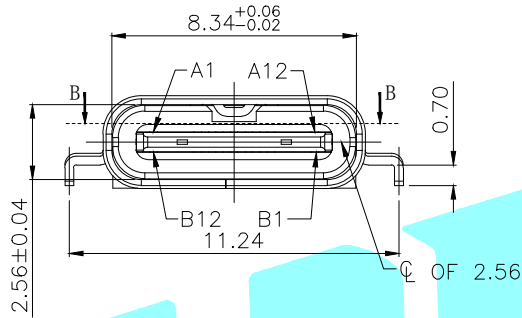
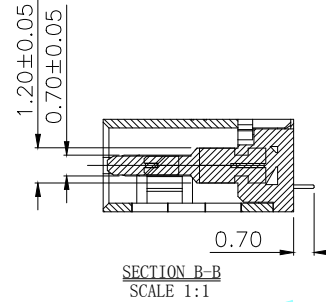
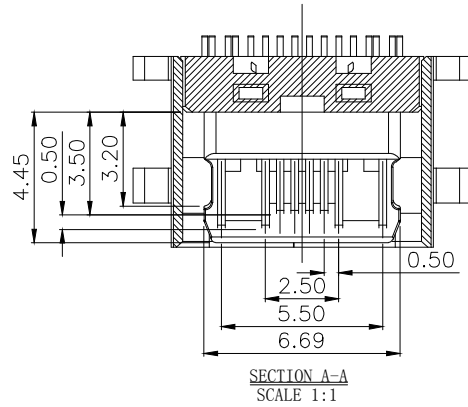
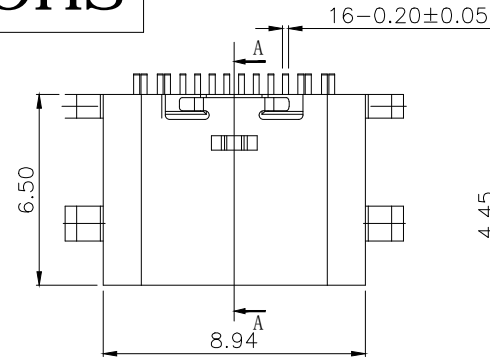
NOTE:

- 1.MATERIAL SPECIFICATION:
 - 1.HOUSING:HIGH TEMPERATURE RESISTANT PLASTIC,UL94 V-0.
 - 2.CONTACTS:COPPER ALLOY
 - 3.MID PLATE: STAINLESS STEEL
 - 4.FRONT SHELL: STAINLESS STEEL
- 2.PLATING SPECIFICATION:
 - 2-1.CONTACTS:
 - Ni 50u" MIN. UNDER PLATED OVER ALL.
 - Au PLATED ON THE FUNCTIONAL AREA OF CONTACT.
 - (GOLD PLATING THICKNESS FOLLOW THE P/N)
 - PLATING SPECIFICATIONS OF THE SOLDER AREA FOLLOW THE P/N
 - 2-2.FRONT SHELL:
 - Ni 30u" MIN. UNDER PLATED OVER ALL.
 - 2-3.MID PLATE:
 - CLEAR ONLY
- 3.MECHANICAL PERFORMANCE,
 - 3-1.INSERTION FORCE: 0.5~2.0kgf.
 - 3-2.REMOVAL FORCE: 0.8kgf~2.0kgf.
 - 3-3.DURABILITY: 10000 CYCLES.
- 4.ELECTRICAL PERFORMANCE,
 - 4-1. CURRENT RATING:3.0A
VOLTAGE RATING:5.0V
 - 4-2. LLCR:
 - VBUS & GND PINS AND OTHER PINS: 40mΩ/PIN MAX.
 - SHIELD: 50mΩ/MAX.
 - LLCR MAX. CHANGE OF ALL PINS: 10mΩ.
 - 4-3.INSULATION RESISTANCE: 100MΩ MIN
 - 4-4.DIELECTRIC WITHSTAND VOLTAGE,AC 100V FOR 1 MINUTE.
5. ENVIRONMENTAL PERFORMANCE:
 - OPERATING TEMPERATURE: -25°C~+85°C.
- 6.IR REFLOW:
 - THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.

A1	GND	B12	GND
A4	VBUS	B9	VBUS
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS	B4	VBUS
A12	GND	B1	GND
PIN	SIGNAL NAME	PIN	SIGNAL NAME

APPROVALS		DATE		HRO 韩豪® ELECTRONICS CO.,LTD			
DRAWN	LIUCAN	2021.8.18		TITLE:	TYPE C单排 SMT 沉板0.8MM		
CHECKED				PART NO.	TYPE-C-31-M-13		
APPROVALS				TOLERANCES ARE	30~以上 ±0.30	±0.20	ANGLE
					10~30 ±0.20	±0.15	UNIT: mm
					5~10 ±0.15	±2'	SCALE: 1:1
					~ 5 ±0.10		PROJ:
ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.	DRAWING NO.
	A		NEW				SHEET 1 OF 1

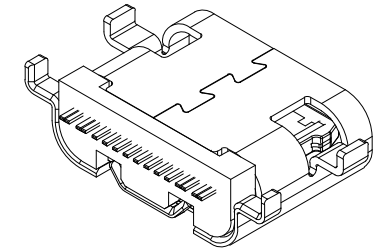
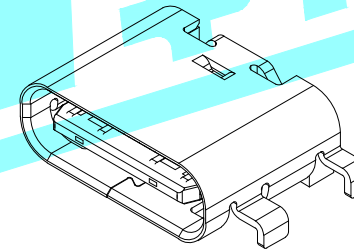
ROHS



RECOMMEND P.C.B LAYOUT (COMPONENT SIDE)
TOLERANCE FOR PCB LAYOUT IS ± 0.05

NOTE:

- MATERIAL SPECIFICATION:
 - HOUSING: HIGH TEMPERATURE RESISTANT PLASTIC, UL94 V-0.
 - CONTACTS: COPPER ALLOY
 - MID PLATE: STAINLESS STEEL
- PLATING SPECIFICATION:
 - CONTACTS:
 - Ni 50u" MIN. UNDER PLATED OVER ALL.
 - Au PLATED ON THE FUNCTIONAL AREA OF CONTACT. (GOLD PLATING THICKNESS FOLLOW THE P/N)
 - GOLD FLASH PLATING ON SOLDER AREA
 - FRONT SHELL:
 - Ni 30u" MIN. UNDER PLATED OVER ALL.
- MECHANICAL PERFORMANCE:
 - INSERTION FORCE: 0.5~2.0kgf.
 - REMOVAL FORCE: 0.8kgf~2.0kgf.
 - DURABILITY: 10000 CYCLES.
- ELECTRICAL PERFORMANCE:
 - CURRENT RATING: 5A
VOLTAGE RATING: 20V
 - INSULATION RESISTANCE: 100MΩ MIN
 - DIELECTRIC WITHSTAND VOLTAGE, AC 100V FOR 1 MINUTE.
- ENVIRONMENTAL PERFORMANCE:
 - OPERATING TEMPERATURE: -30°C~+80°C.
- IR REFLOW:
 - THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.

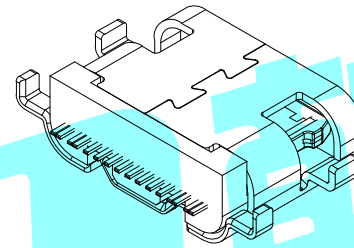
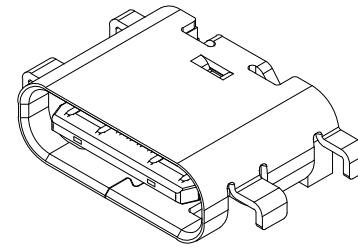
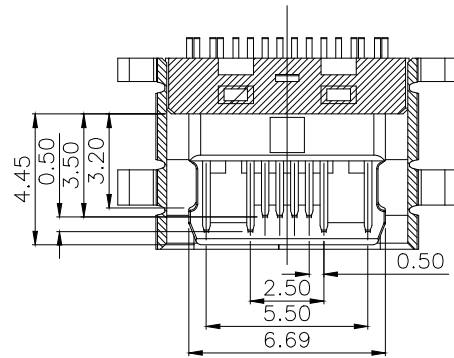
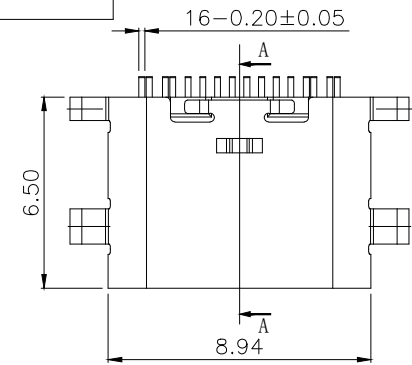


A1	GND	B12	GND
A4	VBUS	B9	VBUS
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS	B4	VBUS
A12	GND	B1	GND
PIN	SIGNAL NAME	PIN	SIGNAL NAME

APPROVALS		DATE		 ELECTRONICS CO., LTD													
DRAWN	LIUCAN	2021.3.6					TITLE:	USB CONNECTOR									
CHECKED				PART NO.	TYPE-C-31-M-13A												
APPROVALS				TOLERANCES ARE	<table border="1"> <tr> <td>30~以上</td> <td>±0.30</td> <td rowspan="4">ANGLE</td> <td rowspan="4">UNIT: mm</td> <td rowspan="4">SCALE: 1:1</td> <td rowspan="4">PROJ: </td> </tr> <tr> <td>10~30</td> <td>±0.25</td> </tr> <tr> <td>5~10</td> <td>±0.20</td> </tr> <tr> <td>~ 5</td> <td>±0.15</td> </tr> </table>	30~以上	±0.30	ANGLE	UNIT: mm	SCALE: 1:1	PROJ:	10~30	±0.25	5~10	±0.20	~ 5	±0.15
30~以上	±0.30	ANGLE	UNIT: mm	SCALE: 1:1	PROJ:												
10~30	±0.25																
5~10	±0.20																
~ 5	±0.15																
ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.	DRAWING NO.	SHEET 1 OF 1									

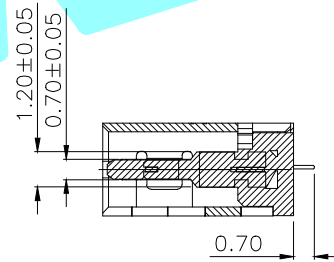
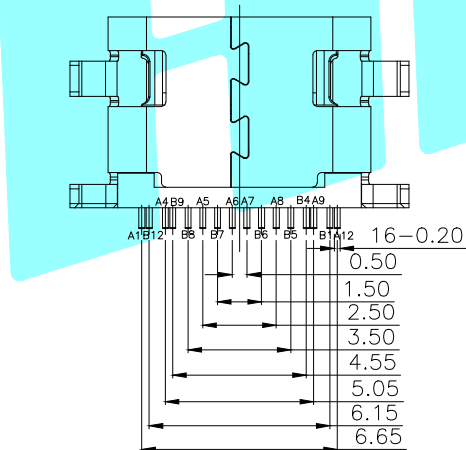
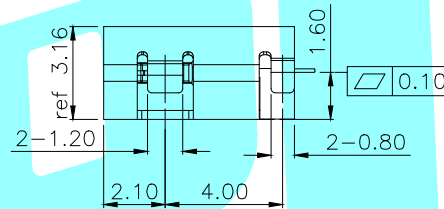
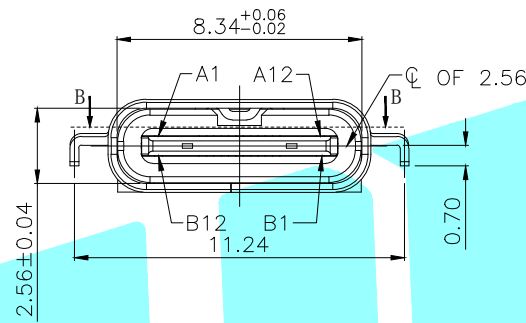
ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.
	A		NEW			

ROHS

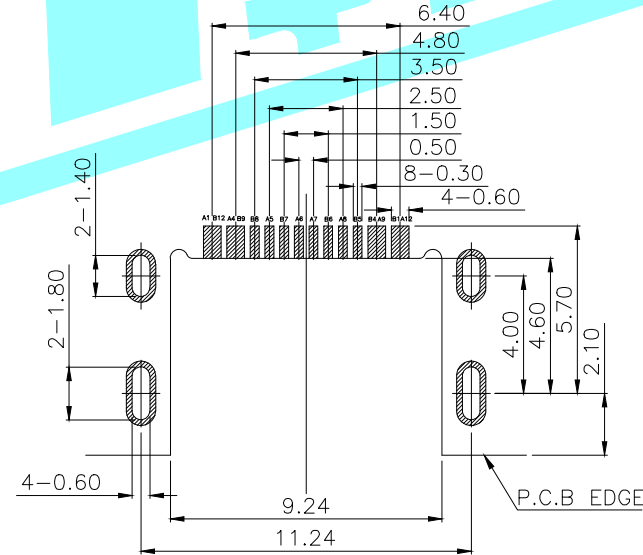


NOTE:

- 1.MATERIAL SPECIFICATION:
 - 1.HOUSING: HIGH TEMPERATURE RESISTANT PLASTIC,UL94 V-0.
 - 2.CONTACTS: COPPER ALLOY
 - 3.MID PLATE: STAINLESS STEEL
- 2.PLATING SPECIFICATION:
 - 2-1.CONTACTS:
 - Ni 50 μ " MIN. UNDER PLATED OVER ALL.
 - Au PLATED ON THE FUNCTIONAL AREA OF CONTACT. (GOLD PLATING THICKNESS FOLLOW THE P/N)
 - GOLD FLASH PLATING ON SOLDER AREA
 - 2-2.FRONT SHELL:
 - Ni 30 μ " MIN. UNDER PLATED OVER ALL.
- 3.MECHANICAL PERFORMANCE,
 - 3-1.INSERTION FORCE: 0.5~2.0kgf.
 - 3-2.REMOVAL FORCE: 0.8kgf~2.0kgf.
 - 3-3.DURABILITY: 10000 CYCLES.
- 4.ELECTRICAL PERFORMANCE,
 - 4-1. CURRENT RATING: 5A
VOLTAGE RATING: 20V
 - 4-2.INSULATION RESISTANCE: 100M Ω MIN
 - 4-3.DIELECTRIC WITHSTAND VOLTAGE,AC 100V FOR 1 MINUTE.
5. ENVIRONMENTAL PERFORMANCE:
 - OPERATING TEMPERATURE: -30°C~+80°C.
- 6.IR REFLOW:
 - THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.



SECTION B-B
SCALE 1:1

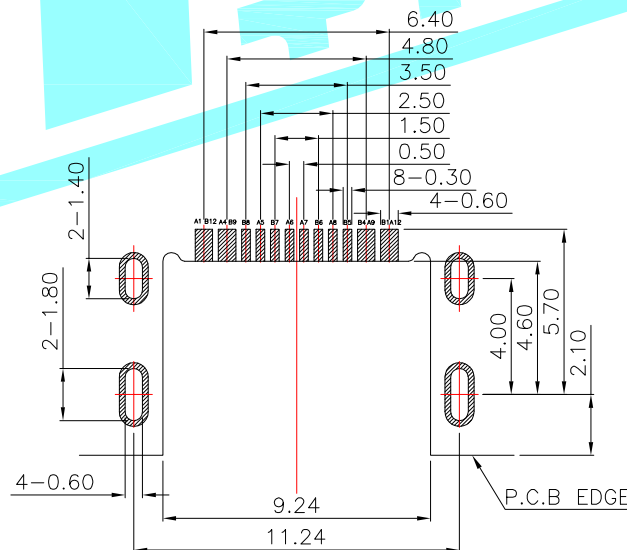
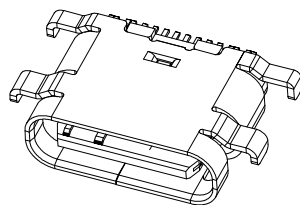
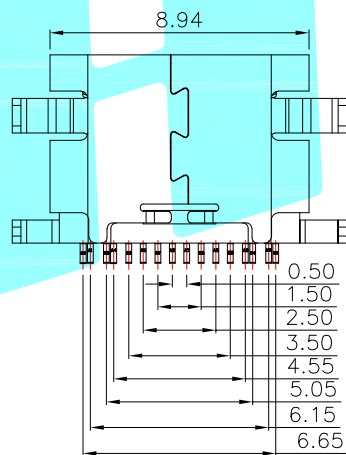
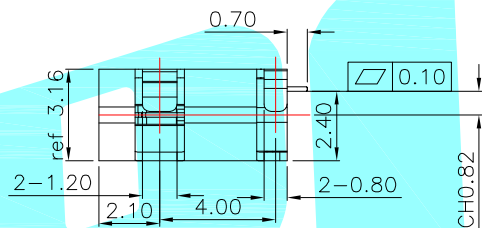
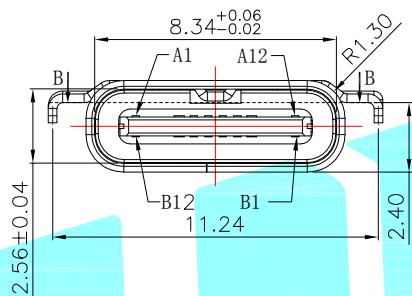
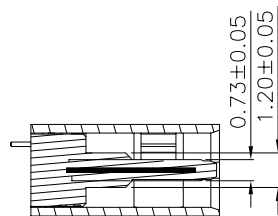
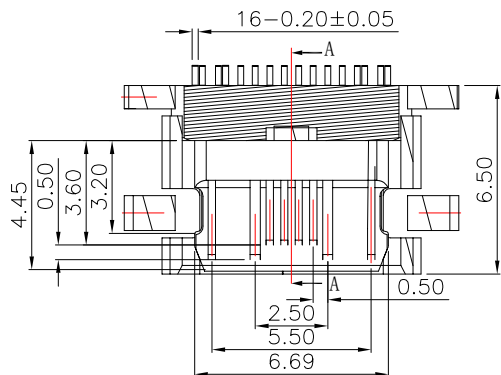


RECOMMEND P.C.B LAYOUT (COMPONENT SIDE)
TOLERANCE FOR PCB LAYOUT IS ± 0.05

A1	GND	B12	GND
A4	VBUS	B9	VBUS
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS	B4	VBUS
A12	GND	B1	GND
PIN	SIGNAL NAME	PIN	SIGNAL NAME

APPROVALS		DATE		HRO 宏 ELECTRONICS CO.,LTD			
DRAWN	LIUCAN	2021.3.6		TITLE:	USB CONNECTOR		
CHECKED				PART NO.	TYPE-C-31-M-13C		
APPROVALS				UNIT: mm	SCALE: 1:1	PROJ:	
TOLERANCES ARE	30~以上	± 0.30	ANGLE	DRAWING NO.	SHEET	1 OF 1	
	10~30	± 0.25					
	5~10	± 0.20					
	~ 5	± 0.15					

ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.
	A		NEW			



RECOMMEND P.C.B LAYOUT (COMPONENT SIDE)
TOLERANCE FOR PCB LAYOUT IS ± 0.05

A1	GND	B12	GND
A4	VBUS	B9	VBUS
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS	B4	VBUS
A12	GND	B1	GND
PIN	SIGNAL NAME	PIN	SIGNAL NAME

NOTE:

- MATERIAL SPECIFICATION:
 - HOUSING: HIGH TEMPERATURE RESISTANT PLASTIC, UL94 V-0.
 - CONTACTS: COPPER ALLOY
 - MID PLATE: STAINLESS STEEL
- PLATING SPECIFICATION:
 - CONTACTS:
 - Ni 50u" MIN. UNDER PLATED OVER ALL.
 - Au PLATED ON THE FUNCTIONAL AREA OF CONTACT. (GOLD PLATING THICKNESS FOLLOW THE P/N)
 - GOLD FLASH PLATING ON SOLDER AREA
 - FRONT SHELL:
 - Ni 30u" MIN. UNDER PLATED OVER ALL.
- MECHANICAL PERFORMANCE,
 - INSERTION FORCE: 0.5~2.0kgf.
 - REMOVAL FORCE: 0.8kgf~2.0kgf.
 - DURABILITY: 10000 CYCLES.
- ELECTRICAL PERFORMANCE,
 - CURRENT RATING: 5A
VOLTAGE RATING: 20V
 - INSULATION RESISTANCE: 100MΩ MIN
 - DIELECTRIC WITHSTAND VOLTAGE, AC 100V FOR 1 MINUTE.
- ENVIRONMENTAL PERFORMANCE:
 - OPERATING TEMPERATURE: -30°C~+80°C.
- IR REFLOW:
 - THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.

APPROVALS		DATE						
DRAWN	LIUCAN	2021.3.6						
CHECKED			TITLE:	USB CONNECTOR				
APPROVALS			PART NO.	TYPE-C-31-M-13D				
TOLERANCES ARE	30~以上	±0.30	ANGLE	UNIT: mm	SCALE: 1:1	PROJ:		
	10~30	±0.25						
	5~10	±0.20						
	~ 5	±0.15						
ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.	DRAWING NO.	SHEET 1 OF 1

_____	A	_____	NEW	_____	_____	_____
ECN NO.	REV.	DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.