

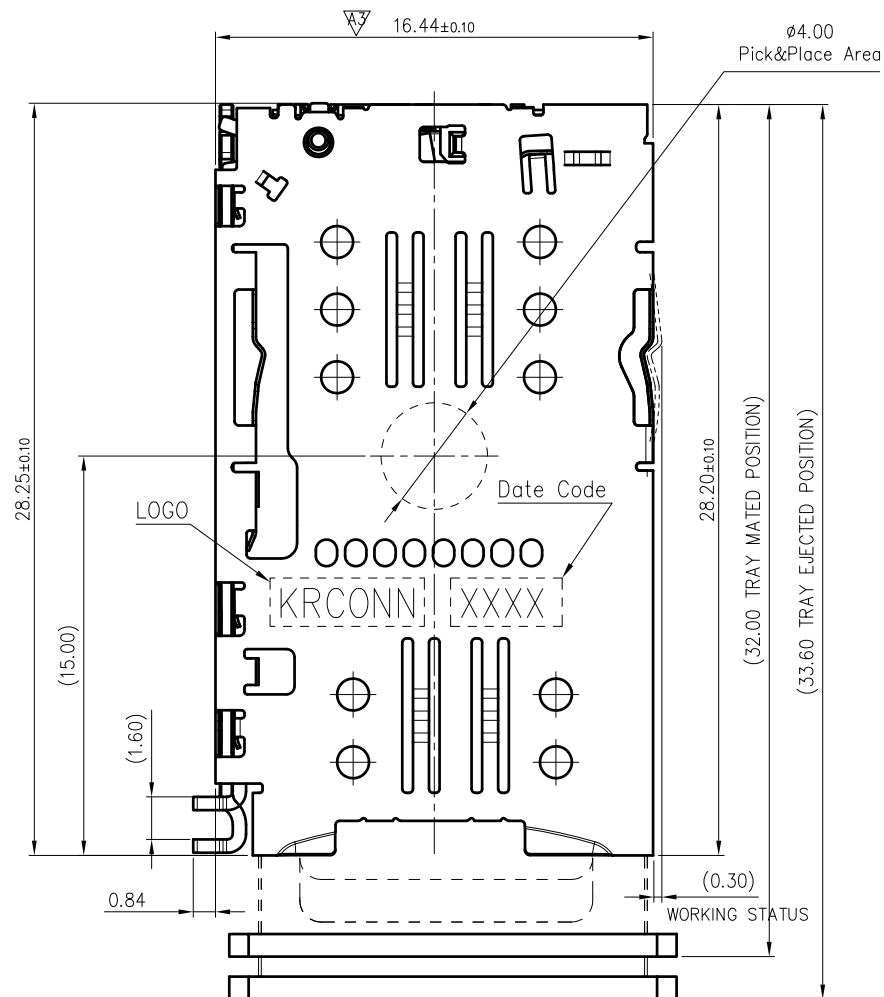
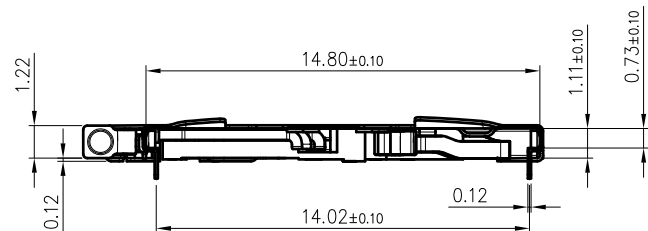
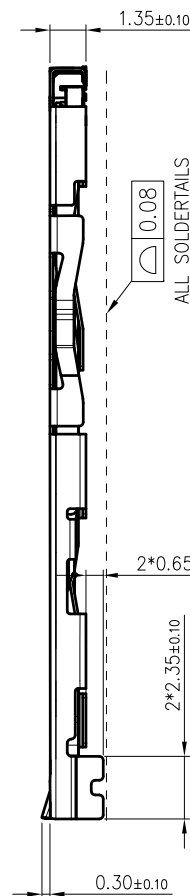
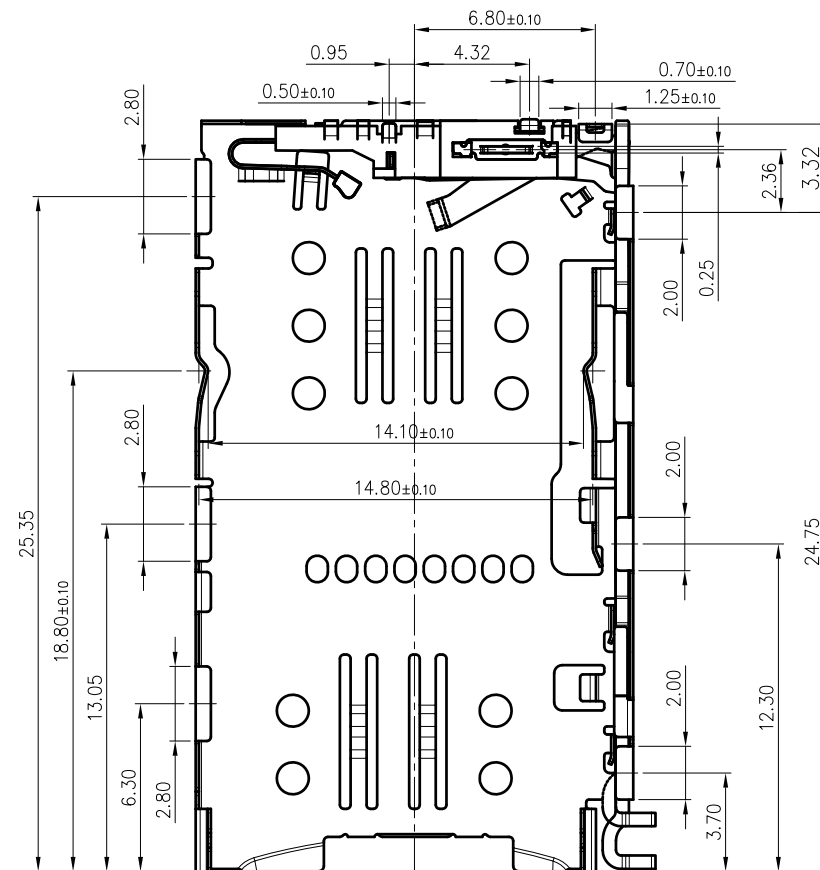
REV.	ECN NO OR DESCRIPTION	REVISED	DATE
A1	NEW RELEASE	ALLEN	2015.05.23
A2	ECN-2006051	ALLEN	2020.06.24
A3	纠正图面宽度尺寸，完善图纸	KEVIN.D	2023.10.23

A

B

C

D



A

B

C

D

UNLESS OTHERWISE
SPECIFIED TOLERANCES

DECIMALS: ANGLES:
X : ±0.5 X : ±2°
X.X : ±0.20 X.X : ±1°
X.XX : ±0.15
X.XXX : ±0.005



深圳市精睿兴业科技有限公司
SHENZHEN KRCONN TECHNOLOGY CO., LTD

TITLE	1.35H Nano&tf 3in2 with tray (Pin Push)Conn.Assem.			
DWN	ALLEN	PART NO. TS0PL-130020-01GK		
CHKD	KEVIN	SCALE: 1:1	UNIT: mm	
APVD	ERIC.W	SIZE: A4	SHEET: 1/4	

CUSTOMER COPY

1

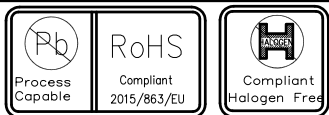
2

3

4

5

6



SPECIFICATION

CONTACT RESISTANCE (data) $\leq 100\text{ m}\Omega$ INITIAL
INSULATION RESISTANCE: $\geq 1000\text{M}\Omega$
HIGH VOLTAGE RESISTANCE: 500V AC, 1 MINUTE
OPERATING VOLTAGE (SELV): 10 V DC
PEAK CURRENT: Max. 0.5 A
OPERATING TEMPERATURE: $-20^{\circ}\text{C}/+85^{\circ}\text{C}$
STORAGE TEMPERATURE: $-20^{\circ}\text{C}/+85^{\circ}\text{C}$
"RoHS" COMPLIANT
MECHANICAL LIFETIME: Min. 3000 MATING CYCLE
CO-PLANARITY: Max. 0.08 MM BEFORE REFLOW
Max. 0.10 MM AFTER REFLOW

Y M D X
D: DATE
M: MONTH
Y: YEAR

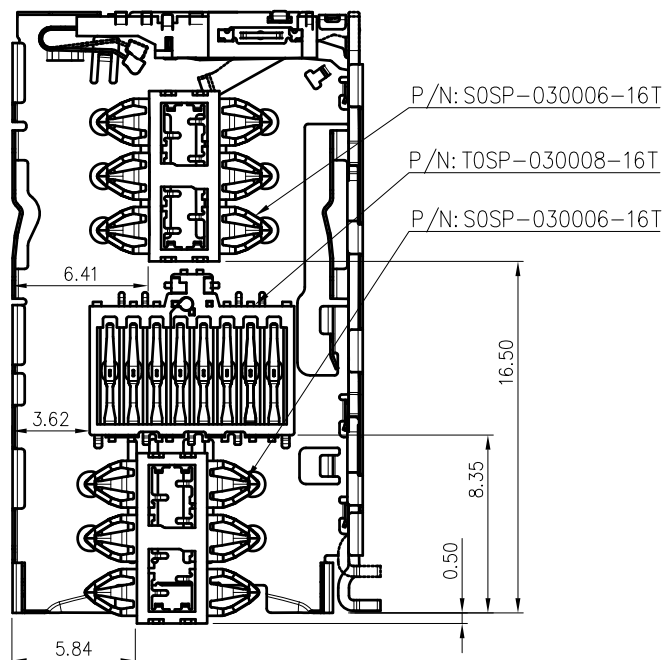
PART No.:

TS0PL-130020-01GK

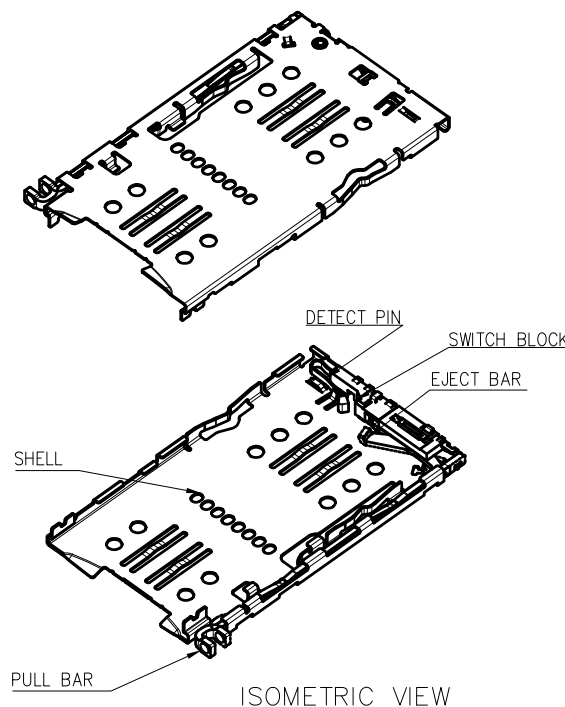
PRODUCT ORDER

13: HEIGHT 1.35mm
00=NORMAL TYPE.(ON PCB)
20=20pin
01=Product Order
With logo&DC

CUSTOMER BOM LIST (客户BOM建档明细)		
PART NAME	P/N	Q'TY
COVER	TS0PL-130020-01GK	1
SIM BLOCK	SOSP-030006-16T	2
TF BLOCK	TOSP-030008-16T	1

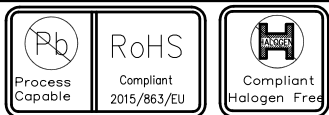


ASSEMBLY



ISOMETRIC VIEW

⑤	EJECT BAR	SUS304-1/2H T=0.40	CLEAN	1
④	PULL BAR	SUS304-H T=0.50	CLEAN	1
③	SHELL	SUS301-H T=0.12	GOLD PLATING 1~3u" ON SOLDER TAIL & CONTACT AREA ALL OVER 30~100u" NICKEL PLATING	1
②	DETECT PIN	SUS301-H T=0.12	GOLD PLATING 1~3u" ON SOLDER TAIL & CONTACT AREA ALL OVER 50~150u" NICKEL PLATING	1
①	SWITCH BLOCK	LCP MG350	GLASS FILLED (OR EQUAL), UL 94V-0, BLACK, NO RECYCLED RESIN.	1
ITEM	DESCRIPTION	MATERIAL	FINISH	Q'TY
UNLESS OTHERWISE SPECIFIED TOLERANCES		 深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO., LTD		
DECIMALS: ANGLES:		TITLE 1.35H Nano&tf 3in2 with tray (Pin Push) Conn.Assem.		
X : ± 0.5	X : $\pm 2^{\circ}$	DWN ALLEN	PART NO. TS0PL-130020-01GK	
X.X : ± 0.20	X.X : $\pm 1^{\circ}$	CHKD KEVIN	SCALE: 1:1	UNIT: mm
X.XX : ± 0.15		APVD ERIC.W	SIZE: A4	SHEET: 2/4
X.XXX : ± 0.005				REV: A3
CUSTOMER COPY				



REV.	ECN NO OR DESCRIPTION	REVISED	DATE
A1	NEW RELEASE	ALLEN	2015.05.23
A2	ECN-2006051	ALLEN	2020.06.24
A3	纠正图面宽度尺寸，完善图纸	KEVIN.D	2023.10.23

MicroSD Block Pin Definition

Pin	NAME
C1	DAT2
C2	CD/DAT3
C3	CMD
C4	VDD
C5	CLK
C6	Vss
C7	DAT0
C8	DAT1

SIM Block Pin Definition

NANO SIM	NAME
S1,S11,S2,S12	Vcc
S3,S13	RST
S4,S5,S14,S15	CLK
S6,S7,S16,S17	I/O
S8,S18	Vpp
S9,S10,S19,S20	GND

Holder Pin Definition

Pin	NAME
P1~P11	Ground
P13	Detect Switch

Timing sequence

When tray insert first time, Detect Sw. is activated

GND — CD(P13) NORMAL CLOSED SITUATION

GND — CD(P13) OPEN SITUATION WHEN TRAY INSERTED

- Soldering Pad area
- Open wire restricted area
(possibility touch of components on PCB)
- Connector outline
- Open wire & copper restricted area
1.Touch area of contact tips, No electrical function and only for mechanical function
2.No first PCB-Layer circuits in the area
- None solder Pad area
1.Touch area of contact tips, No electrical function and only for mechanical function
2.Don't brush Tin pasted on the area during SMT process

UNLESS OTHERWISE
SPECIFIED TOLERANCES

DECIMALS: ANGLES:
X : ±0.5 X : ±2°
X.X : ±0.20 X.X : ±1°
X.XX : ±0.15
X.XXX : ±0.005



深圳市精睿兴业科技有限公司
SHENZHEN KRCONN TECHNOLOGY CO., LTD

TITLE	1.35H Nano&tf 3in2 with tray (Pin Push)Conn.Assem.			
DWN	ALLEN	PART NO. TSOPL-130020-01GK		
CHKD	KEVIN	SCALE: 1:1	UNIT: mm	
APVD	ERIC.W	SIZE: A4	SHEET: 3/4	REV: A3

CUSTOMER COPY

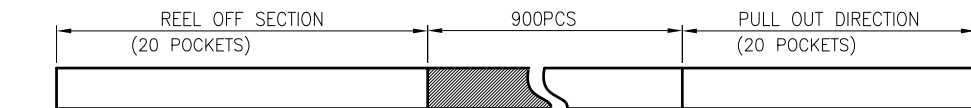
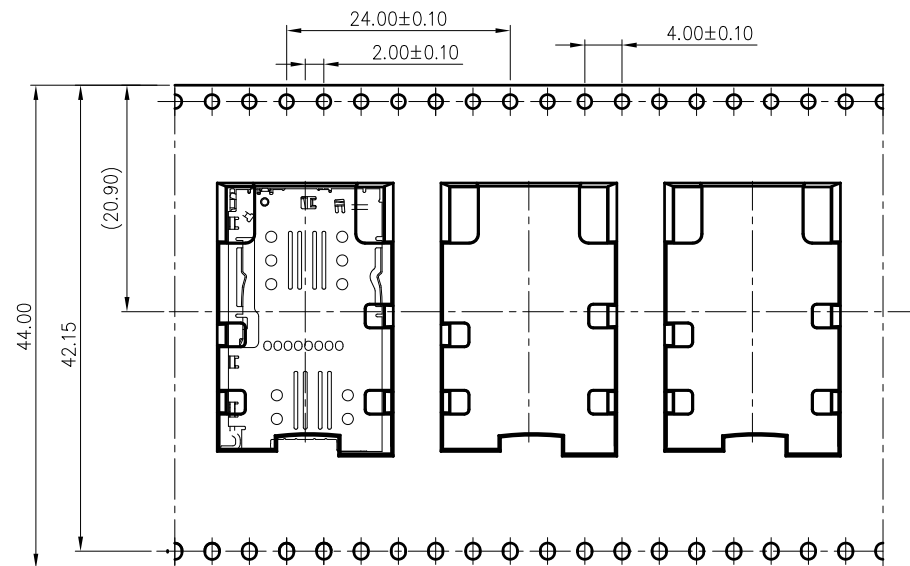
Recommend PCB Layout

Recommend tolerance: ±0.05
Recommend Stencil Thickness: 0.10



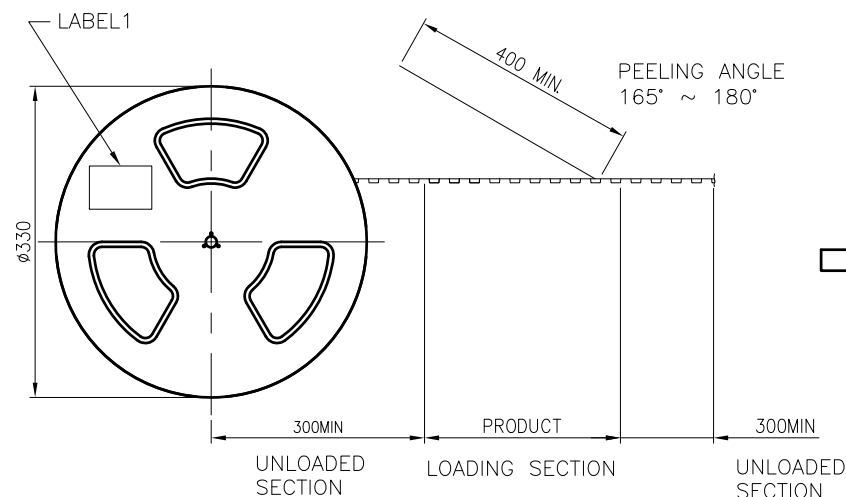
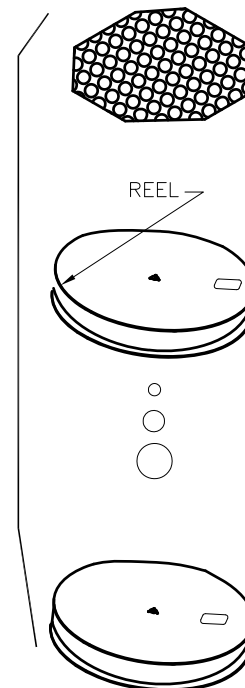
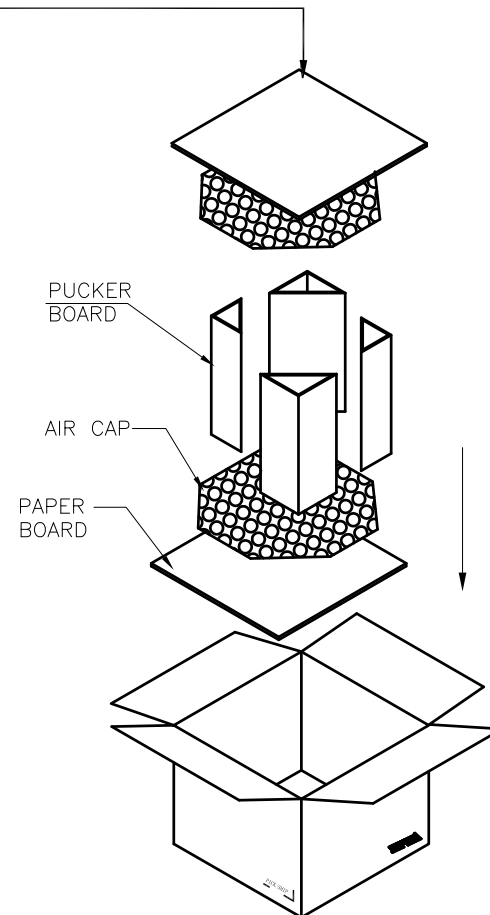
REV.	ECN NO OR DESCRIPTION	REVISED	DATE
A1	NEW RELEASE	ALLEN	2015.05.23
A2	ECN-2006051	ALLEN	2020.06.24
A3	纠正图面宽度尺寸，完善图纸	KEVIN.D	2023.10.23

CONN. PART NO.	CONN. QTY./REEL	REEL QTY./CARTON	CONN. QTY./CARTON
TSOPL-130020-01GK	900	5	4500 PCS

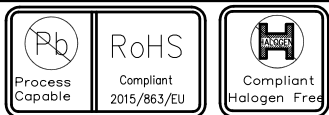


CUSTOMER TO USE DIRECTION
PULL OUT DIRECTION (出料方向)

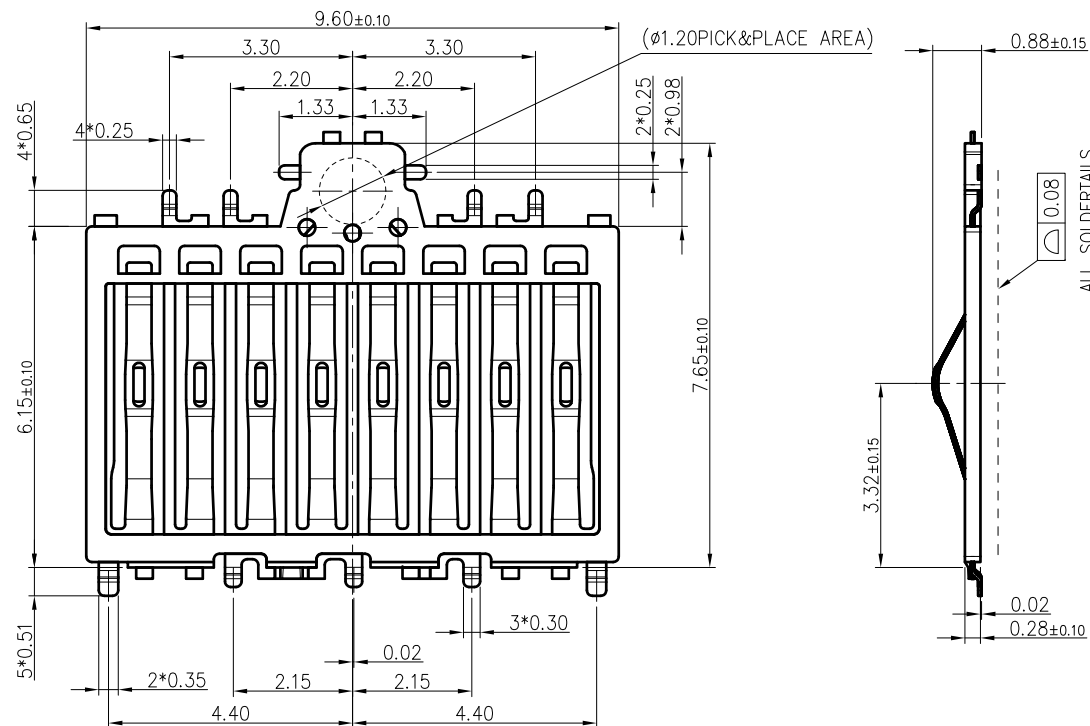
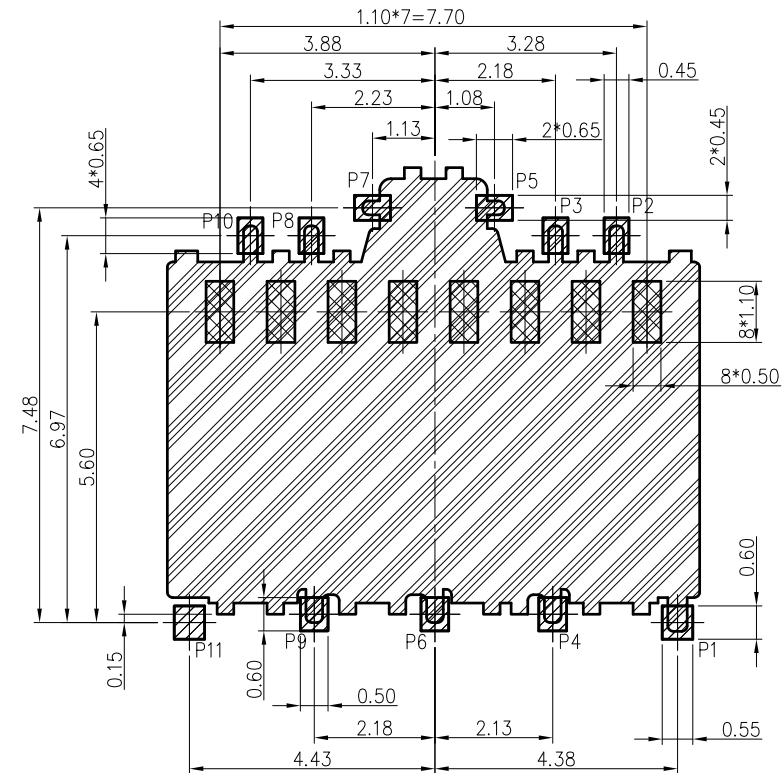
TOTAL 5 LAYERS



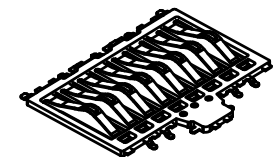
UNLESS OTHERWISE SPECIFIED TOLERANCES		深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO., LTD			
DECIMALS:	ANGLES:	TITLE	1.35H Nano&tf 3in2 with tray (Pin Push)Conn.Assem.		
X : ±0.5	X : ±2°	DWN	ALLEN	PART NO. TSOPL-130020-01GK	
X.X : ±0.20	X.X : ±1°	CHKD	KEVIN	SCALE: 1:1	UNIT: mm
X.XX : ±0.15		APVD	ERIC.W	SIZE: A4	SHEET: 4/4
X.XXX : ±0.005					REV: A3
CUSTOMER COPY					



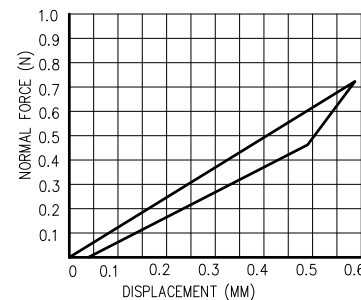
REV.	ECN NO OR DESCRIPTION	REVISED	DATE
00	NEW RELEASE	ALLEN	2015.05.23



- THIS AREA SHOULD BE FREE OF ANY CONDUCTIVE TRACES
- SMT SOLDER AREA
- OPEN WIRE RESTRICTED AREA (POSSIBLY TOUCH OF COMPONENTS ON PCB)

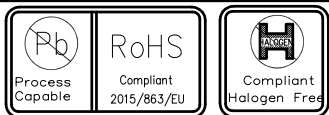


- NOTES:
1. MATERIAL: SEE TABLE
 2. ELECTRICAL PERFORMANCE:
 - 2.1 RATED CURRENT: MAX 0.5A; VOLTAGE: MAX 10V
 - 2.2 CONTACT RESISTANCE: 100MILLI OHMS MAX.
 - 2.3 DIELECTRIC WITHSTANDING VOLTAGE: 500 VAC FOR 1 MINUTE MIN.
 3. MECHANICAL PERFORMANCE:
 - 3.1 DURABILITY: 3000 CYCLES
 - 3.2 NORMAL FORCE 20gf MIN.
 4. ROHS OF ALL MATERIALS COMPANY WITH<<AGREEMENT ON THE USE OF TOXIC AND HAZARDOUS SUBSTANCES>>THAT WE SIGNED WITH LONG QI.

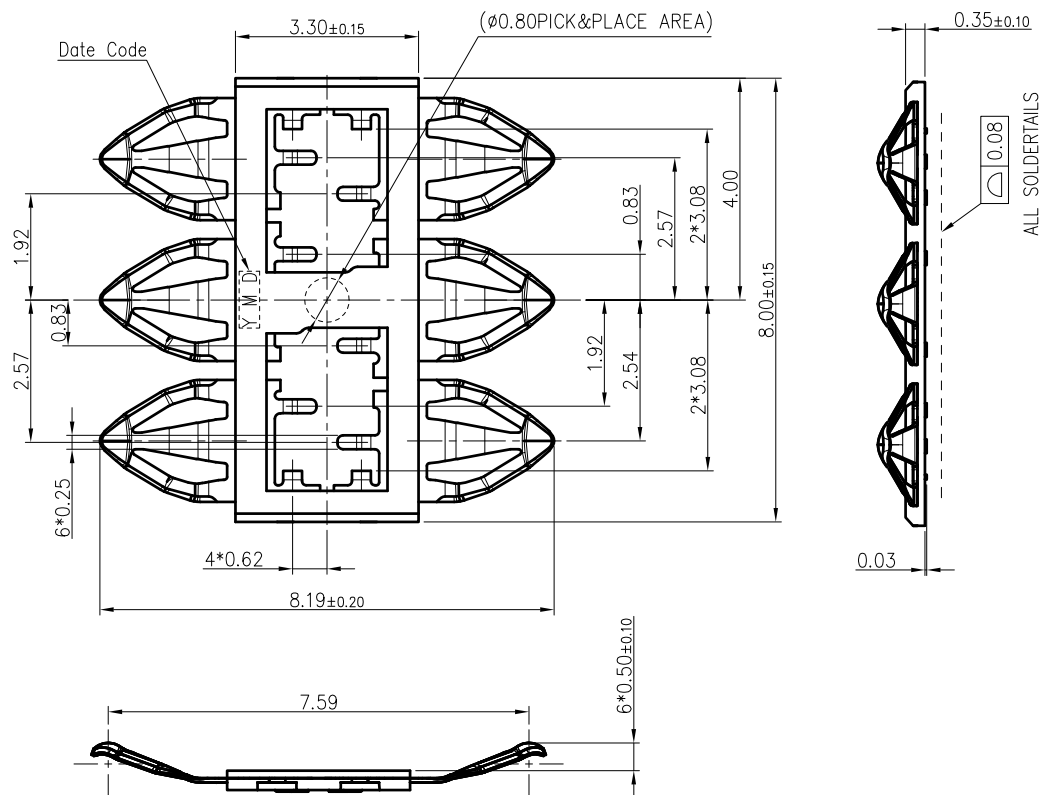
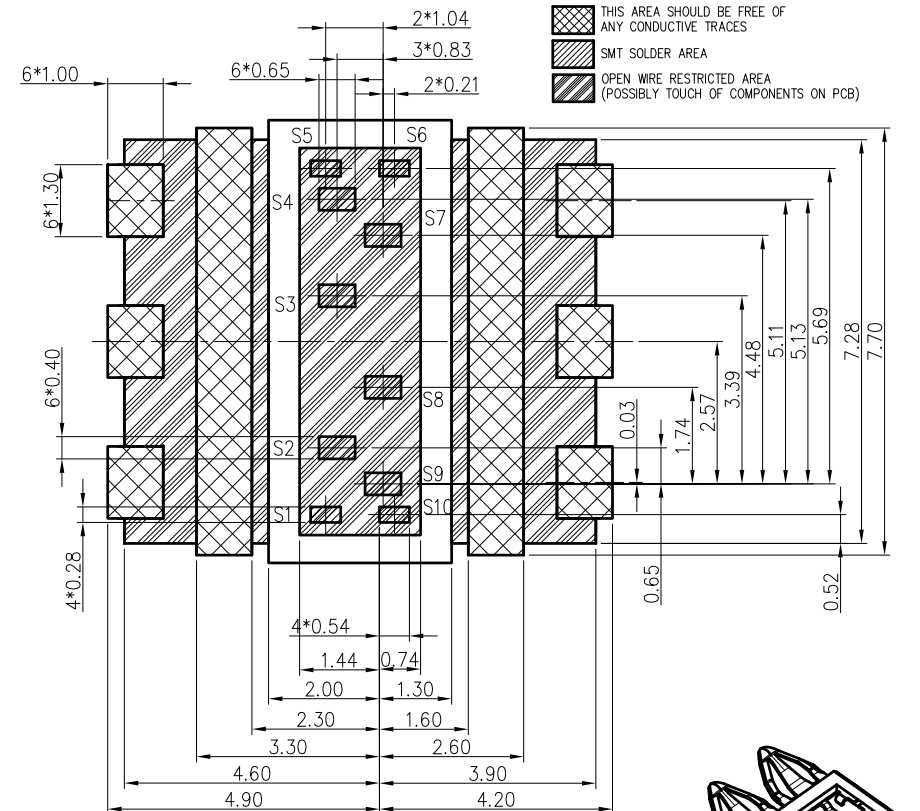


MICRO SD-PIN	
PIN NO.	PIN NAME
P1	DAT2
P2	CD/DAT 3
P3 P4	CMD
P5	VDD
P6 P7	CLK
P8 P9	VSS
P10	DAT 0
P11	DAT 1

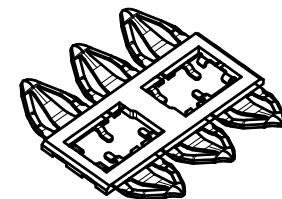
2	TERMINAL	C5240 T=0.06	GOLD PLATING 1~3u" ON SOLDER TAIL AREA; GOLD PLATING 3~5u" ON CONTACT AREA; ALL OVER 50~150u" NICKEL PLATING		1
1	HOUSING	LCP	GLASS FILLED (OR EQUAL),UL 94V-0, BLACK,NO RECYCLED RESIN.		1
ITEM	DESCRIPTION	MATERIAL	FINISH		Q'TY
UNLESS OTHERWISE SPECIFIED TOLERANCES		<div><div></div><div>深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO. , LTD</div></div>			
DECIMALS: ANGLES:		TITLE 6PIN 0.28MM Micro SD BLOCK CONN.			
X :±0.5 X :±2°	DWN ALLEN PART NO. T0SP-030008-16T				
X.X :±0.20 X.X :±1°	CHKD KEVIN		SCALE: 1:1	UNIT: mm	
X.XX :±0.15	APVD ERIC.W		SIZE: A4	SHEET: 1/2	REV: A0
X.XXX :±0.005	CUSTOMER COPY				



REV.	ECN NO OR DESCRIPTION	REVISED	DATE
A0	NEW RELEASE	ALLEN	2015.05.23



RECOMMEND PCB LAYOUT (TOLERANCE ±0.05)



- NOTES:
- MATERIAL: SEE TABLE 1.
 - SPECIALITY:
 - Rated current: 0.5A Max
 - Rated voltage: 10V DC
 - Contact Resistance: 60mΩ MAX
 - Insulation Resistance: 1000MΩ MIN 500V DC
 - Dielectric withstanding voltage: 500V AC 1 MINUTE.
 - Solder ability: 245±5°C/5±0.5s.
 - Durability: 3000 Cycles Min.
 - Operating condition: Temperature: -20°C~+85°C Humidity 80% R.H MAX

DATE CODE: Y M D
D: DATE
M: MONTH
Y: YEAR

SIM-PIN	
P/N	NAME
S1 S2	VCC
S3	RST
S4 S5	CLK
N/A	Reserved
S9 S10	GND
S8	VPP
S6 S7	I/O
N/A	Reserved

②	Housing	1	LCP	COLOUR: BLACK	UL 94V-0
①	Contact	1	COPPER ALLOY	Contact area: Plating Au 1~3u" min Solder area: Plating Au 1u" min Under Plating: Ni 50u" min	T=0.08±0.01mm
NO.	PART NAME	QTY	MATERIAL	DESCRIPTION	REMARK
UNLESS OTHERWISE SPECIFIED TOLERANCES			 深圳市精睿兴业科技有限公司 SHENZHEN KRCONN TECHNOLOGY CO., LTD		
DECIMALS:		ANGLES:		TITLE 6PIN 0.3MM SIM BLOCK CONN.	
X	: ±0.5	X	: ±2°	DWN	ALLEN PART NO. SOSP-030006-16T
X.X	: ±0.20	X.X	: ±1°	CHKD	KEVIN SCALE: 1:1 UNIT: mm
X.XX	: ±0.15			APVD	ERIC.W SIZE: A4 SHEET: 1/2
X.XXX	: ±0.005				REV: A0
CUSTOMER COPY					