

SUPPLIER DATA SHEET



1. IDENTIFICATION

Date: MAY 2015

Doc. Code: 0001

Company Name	Hosonic Electronic Co.,LTD.		Brand	Hosonic
			Chinese Name	鸿星电子有限公司
Capital (USD)	US\$12,500,000		Year Started	1979
Business Address	Liangbo Rd.Yuang,Hanzhou Zhejiang,China(Hanzhou plant)		Post Code	23804
TEL	86-571-8878189 ext 221		FAX	86-571-88788859
e-mail	mike@hosonic.com		WEB site	www.hosonic.com
Representative	Mr. Homer Lin		Chairman	Homer Lin
Total Asset	US\$4,000,000		Sales Amount	US\$150,000,000
Employees	1,400	Engineer	29	Legal Status Limited Company
Premises (Factory)	20000m2	Listed on	Listed	
Person in Charge	Mr.Mike	Section	6 building	TEL/ E-mail 886-8687-5200 ext 271

2. INFORMATION OF FACTORY

Import/ Export License	1. Yes			Import/ Export Rights	1. OWN			
QMS Certification ID	ISO9001			EMS Certification ID	ISO14000	TS16947		
	N0000818-1				N0000819-1	N0000823-1		
Safety Certification ID								
Product Capacity	Brand	Item		Quantities		Pcs. / month		
	Original Brand	SMD Crystal		34KK				
		SMD OSC		6KK				
		DIP crystal		20KK				
		DIP OSC		1KK				
	OEM/ODM Brand							
Major Customer	Customer		Application		Item			
	1	Apple		I-phone				
	2	Samsung		DVD				
	3	SAGEM		Mobile				
	4	ASUS		computer				
5	SHARP		LCD module					
Major Supplier	Supplier		Material		Location			
	1	kyocera		PKG/CAP		Japan		
	2	sumitomo		PKG/CAP		Japan		
	3	Threebond		EPOXY		Japan		
	4	Fujikura		EPOXY		Japan		
5	wanotec		lid		Japan			
Strong Technology	Quality			Cost				
	We have two crystal blank factory			We have two crystal blank factory				

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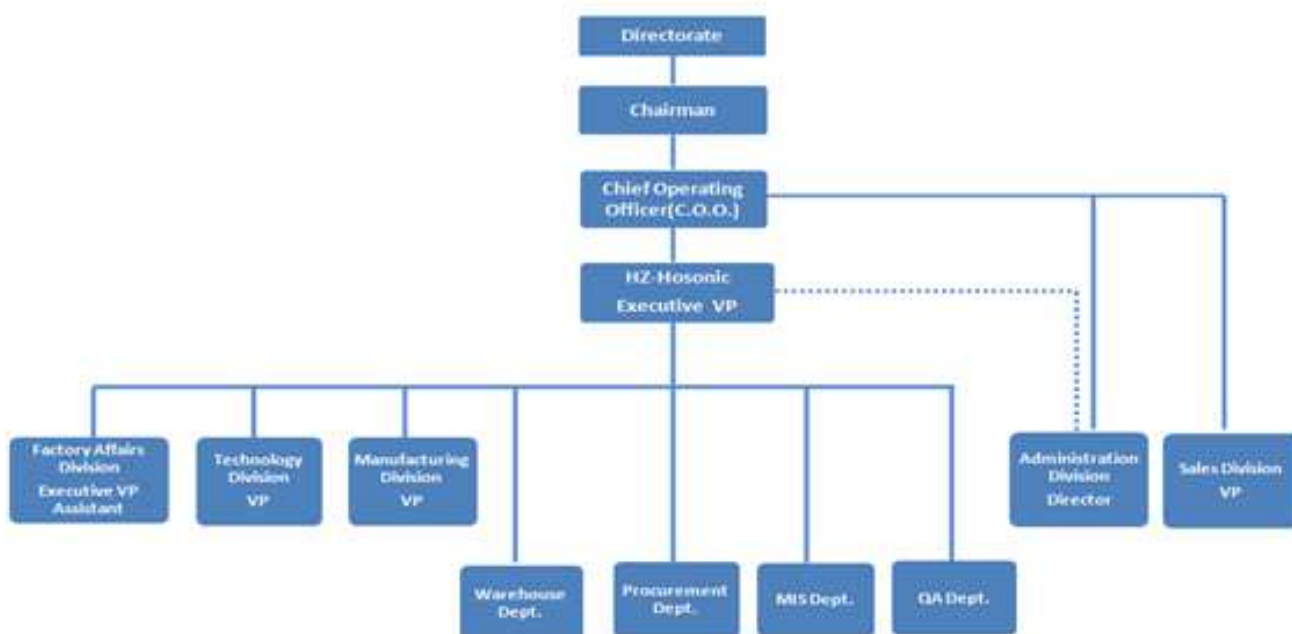
2. INFORMATION OF FACTORY

Doc. Code:

Equipment	Production			Inspection			
	Automatic Cleaning machine Base coating machine automatic Bonding machine Automatic sealing machine			S&A 250B S&A 280A/B PRA1020 W2200 S&A2800			
Factory Location	Factory	Country	Region	Travel	Via	Travel by	Time
	Hangzhou	China	Zhejiang		Hanzhou ST	Train	1.5H
	Zhuhai	China	Guangdong		Hongkong	Ship	1H

3. Organization

Organization chart



4. INFORMATION OF QUALITY

Quality Policy

- 1) Quality First
- 2) Customer Satisfied
- 3) Mutual Benefits

NO.	Process			Reference Doc	Doc No.	Machine/Tool	Process Management					
	QC	W/S	Remark				Control Items	Inspected items	Sample Quantity	Department	Inspection Method and Record	Recorded in
010	◆		Blank IQC	Inspection Instruction	HOS-3-06-301	Manual Frequency sorter, Microscope, Micrometer, 250 A, TC	Appearance; Size; Frequency distribution; Electrical property	Appearance; Dimensional accuracy: 0.01; Frequency distribution; ESR TC Freq.	Appearance: AQL0.65; Size N=10; Frequency distribution: N=10, Ac=0, Re=1; TC	QC	Blank inspection record	HOS-4-127 HOS-4-128
020	○		Vacuum cleaning	Working instruction	HOS-3-08E-110	HFE-7100 A&Z25 Cleaning fluid; Vacuum cleaner	Ultrasonic frequency; Time	133K±40K, 6min	100%	Production Dept.	Record	HOS-4-082
030	◆		Blank Clean and inspection	Inspection Instruction	HOS-3-08E-810	8X Magnifier	Cleanness	Appearance	Appearance: 20Pcs/Lot.	Production Dept.	N/A	N/A
040	○		Mask Loading	Working instruction	HOS-3-08E-120	Plating MASK, Screwdriver cushion, Protection board	Broken; Crash; Deviation	Broken, Crash Deviation	100%	Production Dept.	NIS	NIS
050	○		Secondary cleaning	Working instruction	HOS-3-08E-130 HOS-3-08E-131	Deionized water impedance meter/ Oven	Cleanness; Temperature; Time; Deionized water impedance	Appearance; water impedance>8 MO; Temperature: 190±10℃; Time: 60±10min	Appearance: 100%	Production Dept.	Record	HOS-4-082
060	◆		Silver Stick Incoming Inspection	Inspection Instruction	HOS-3-06-318	Plating Machine; X-RF Tester	Appearance; Time-limited; Hazardous substances	Appearance; No hazardous substances	1 Pack/Lot; 2Stove/Lot (sample producing)	QC	Incoming inspection record	HOS-4-065
070	○		Base plating	Working instruction	HOS-3-08E-142 HOS-3-08E-140 HOS-3-08E-141 HOS-3-08E-143	Plating Machine; Silver stick; Silver plate; MASK	Vacuum; Temperature; Power	When replace the target material, Vacuum: 1.5K-3Pa; 150℃; 2-3min	100%	Production Dept.	Inspection Record	HOS-4-174
080	○		Mask unloading	Working instruction	HOS-3-08E-142 HOS-3-08E-140 HOS-3-08E-141	MASK; Screwdriver	Appearance; Freq. ESR; fastness	Appearance; Freq. -2500~500ppm; Resistance in accordance with traveler card	Appearance: 100% Freq. ESR: 3Pcs/Lot; fastness: 3Pcs/Lot	Production Dept.	Inspection Record	HOS-4-029
090	○		Plating Visual Inspection	Working instruction	HOS-3-08E-146	40X Magnifier	Visual inspection	Appearance	100%	Production Dept.	NIS	NIS
100	◆		Inspection on electrical parameter & Adhesive	Inspection Instruction	HOS-3-08E-820	E4916A Network analyzer; Transparent plastic	Appearance; Freq./ESR; fastness	Appearance; fastness; Freq. -2500~500ppm; Resistance in accordance with traveler card	Appearance: 10Pcs/Lot; fastness: 3Pcs/Lot/4hr; Freq. ESR: 3Pcs/Lot; AC=0, RE=1; Frequency: 5Lot/4Hr	Production Dept.	Inspection Record	HOS-4-479
110	◆		Base IQC	Inspection Instruction	HOS-3-06-333	Slide calliper rule; Magnifier; Helium leak detectors; Curvature gauge; Impedance device; X-RF Tester	Appearance; Size; Closure; welding; Curvature; Connectivity; Hazardous substances	Helium leak: 1E-8; New added Tin>95%; Curvature>2mm; Connectivity>500MO	Appearance: AQL=1.0; Seal welding; Solder N=20; Curvature; Connectivity; Hazardous substances N=5 Standard: AC=0 RE=1	QC	QC report	HOS-4-065
120	◆		Epoxy IQC	Inspection Instruction	HOS-3-06-312		Appearance; validity; Viscosity; Hardness; Resistivity; Hazardous substances	Appearance; Within the validity period; NO hazardous substances	Right amount: AC=0 RE=1	QC	QC report	HOS-4-065
130	○		Assembling & Bonding	Working instruction	HOS-3-08E-150 HOS-3-08E-151 HOS-3-08E-152	Bonding Machine; MASK; Base; jig shelf; Tweezers	Appearance	Appearance	Appearance: 100%	Production Dept.	NIS	NIS
140	◆		Inspection Assembling & Bonding	Inspection Instruction	HOS-3-08E-830	40X Magnifier	Appearance	Appearance	Appearance: 10Pcs/Lot; 5Lot/4Hr; AC=0, RE=1	Production Dept.	Inspection Record	HOS-4-025

							inspection	Appearance	property: 10Pcs/Lot 5Lot/4Hr			
220	◆		Incoming Inspection Lid	Inspection Instruction	HOS-3-06-332	Slide calliper rule; Helium leak detectors; X-RF Tester	Visual inspection, Size; Closure welding; Hazardous substances	Appearance; No leakage; NO hazardous substances	Appearance: LEVEL II AQL:1.0; Size: N=20, Ac=0, Re=1; Leakage <1ES N=10, Ac=0, Re=1; No hazardous substances	QC	Incoming inspection record	HOS-4-065
230	○		Vacuum Bake		HOS-3-08E-191 HOS-3-08E-192 HOS-3-08E-193	Vacuum oven	Temperature, Time	180°C ± 10°C, 60min	100%	Production Dept.	Checklist	HOS-4-174
240	○	KEY PROCESS	AUSM soldering and sealing	Working instruction	HOS-3-08E-193	Seal welding machine	Visual inspection, Tightness	Appearance; Leakage <1E-8cc/sec	Appearance: 100% Tightness: 100%	Production Dept.	Record; Checklist	HOS-4-013 HOS-4-174
			SEAM soldering and sealing	Working instruction	HOS-3-08E-192	Seal welding machine; Dew point meter	Visual inspection, Tightness	Appearance; Leakage <1E-8cc/sec	Appearance: 100% Tightness: 100%	Production Dept.	Record; Checklist	HOS-4-013 HOS-4-174
			SEAM soldering and sealing	Working instruction	HOS-3-08E-191	Seal welding machine; Dew point meter	Visual inspection, Tightness	Appearance; Leakage <1E-8cc/sec	Appearance: 100% Tightness: 100%	Production Dept.	Record; Checklist	HOS-4-013 HOS-4-174
			GLASS soldering and sealing	Working instruction	HOS-3-08E-190	Pliers; Seal welding machine	Visual inspection, Tightness, thrust	Lid smooth; Glue evenly; Leakage <1E-8cc/sec thrust: 5Kg	Appearance: 100% Tightness: 100% thrust: 2Pcs/4Hr	Production Dept.	Record; Checklist	HOS-4-013 HOS-4-174
250	○		Reflow	Working instruction	HOS-3-08E-200	Reflow machine	Temperature, Time	Peak value: 275 ± 5°C Time: 60s~120s	100%	Production Dept.	N/A	N/A
260	○		Helium leak test	Working instruction	HOS-3-08E-202	Helium-gas compressing Machine, Helium-gas Leaking Inspection Machine	Leakage	1.0E-8cc/sec; Exhaust time: 20sec; Inspection time: 20sec	100%	Production Dept.	N/A	N/A
270	○		Bubble leak test	Working instruction	HOS-3-08E-201	Fluorine oil leaking Machine, FC-40	Temperature	Heating set: 125°C	100%	Production Dept.	Checklist	HOS-4-174
				Working instruction	HOS-3-08E-203	ES-5085	Leakage	-60pa<Leakage<+60pa	Below the 4025 size: 100%	Production Dept.	N/A	N/A
280	○		Aging	Working instruction	HOS-3-08E-210	Bake oven	Temperature, Time	Temperature: 125 ± 10°C Time: 48Hr.	100%	Production Dept.	N/A	N/A
290	○		Reflow	Working instruction	HOS-3-08E-200	Reflow machine	Temperature, Time	Peak value: 275 ± 5°C Time: 60s~120s	100%	Production Dept.	N/A	N/A
300	○		Secondary Bubble leak test	Working instruction	HOS-3-08E-201	Fluorine oil leaking Machine, FC-40	Temperature	Heating set: 125°C	100%	Production Dept.	Checklist	HOS-4-174
310	○		Alcohol press	Working instruction	HOS-3-08E-114	Pressure tank; Alcohol	Pressure/Time	0.45"0.55MPa; 10min	100%	Production Dept.	N/A	N/A
320	○		Testing and typeset	Working instruction	HOS-3-08E-220	Tester	DLD, Freq., RR, Insulation	In accordance with work orders or customer requirements	100%	Production Dept.	N/A	N/A
330	○		Marking	Working instruction	HOS-3-08E-230 HOS-3-08E-231	Laser carving machine	Carved content, Visual inspection	Carved content	100%	Production Dept.	N/A	N/A
340	◆		Marking appearance inspection	Inspection Instruction	HOS-3-08E-870	8X Magnifier	Carved content, Visual inspection	Carved content	100%	Production Dept.	Record	HOS-4-212
350	◆		Final test	Inspection Instruction	HOS-3-06-328	250B	Electrical property, Visual inspection	DLD, Freq., ESR: AQL=0.04 Insulation>500MΩ	MIL-STD-105D LEV EL 0, Insulation 50Pcs/Day AC=0 RE=1	QC	Storing inspection record	HOS-4-117
360	○		Testing and Taping	Working instruction	HOS-3-08E-240	Testing and Taping machine Peel Back Tester	Electrical property, Peel back strength, Remain length of the Tape; Quantity	Electrical property in accordance with work orders; Peel back strength: 20~70g Remain length of the outer Tape >400mm Remain length of the inner Tape >160mm	100%; MIL-STD-105D LEV EL 0, Insulation 50Pcs/Day AC=0 RE=1	Production Dept.	Peel back strength record	HOS-4-137
370	○		Outline Inspection after Taping	Working instruction	HOS-3-08E-250	8X Magnifier, Rolling disc	Visual inspection, Specification	Label, product whether all match; The arranged direction in accordance with required, NO	100%	Production Dept.	N/A	N/A