

Factory Audit Report

Client	Worldtech	Al Service No	O-cn-13118
Supplier	Shenzhen Forward Technology Co., Ltd.	Auditor	Andy Tung
Factory	Shenzhen Forward Technology Co., Ltd.	Audit Date	01/18/2013

General Overview of the Audit's findings

Field	Score / 5	Weight /5	Weighted Score
Factory Organization – Production process	4	3	12
Production lines - Capacity	3	4	12
Factory facilities - machinery conditions	3	4	12
Quality Assurance System	4	4	16
Social accountability	1	2	2
Supply	4	3	12
R&D – Sampling capacity	4	4	16
Hygiene - Security	2	2	4
Environment	1	2	2
Special Feature 1: XXXXX specs	2	4	8
Special feature 2 : Technical dev. capacity	3	4	12
	total	36	108

Final Score

6.6 / 10

Important remarks

- 1. Factory evaluation audit was conducted on 22^{nα} of Jan. 2013.
- 2. The factory is well organized and apply properly the local Chinese labor law.
- 3. The factory was certified against ISO9001: 2000.
- 4. Issues were found in terms of Environment.



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Part 1

Factory profile

Gei	neral information	
1	Date of foundation	2005
2	Legal status	Private
3	Location	Xixiang Town, Bao'an, Shenzhen, China
4	Area	5330 m2
5	Number of office staff	38
6	Total number of workers	205-210
7	Factory Manager	Mr.Zhang chunxi
8	Main products	Table PC
9	Main market	40% Europe, 30% Asia, 20% USA
11	Business license	Certificate No.: 4403061262328
		Date issued: 20/04/2005
		Expiration: 20/04/2015
10	Annual turnover	2012 110 M RMB Trend:
	for the past 3 years	2011 100 M RMB
		2010 80 M RMB

Communication infrastructures	
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12	Telephone	40 sets
	Fax	5 sets
	Computer	50 units
	Internet	Yes
	Homepage	www.framemory.com

Products / Markets

Product type	Major customer	Market location	Monthly Order	Quota
	name		Qty	
Tablet PC	Diunamai	Italy	5000 pcs	
			(100 000 US\$)	
	Intreeo	Italy	3000 pcs	
			(50 000US\$)	
	Meguiar's	USA	1000 pcs	
			(20 000 US\$)	

Recommendations /	credential
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Company name	Country	Contract	Products	Details
Innovate	France	5000 Pcs/ mth	Tablet PC	

Related pictures:

Building





Gate of Factory



Factory exterior view



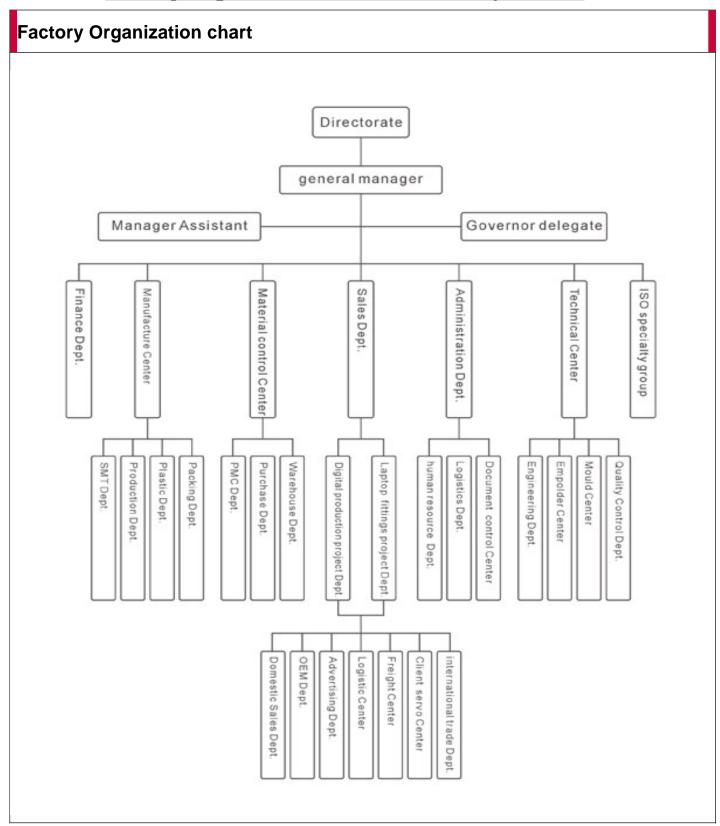
Office

Computer room



Part 2

Factory Organization and Production process





Production workflow char 5 Design (CAD) 3 9 **SMT** 24 4 DIP 37 QC Assembly / 5 **Packing** line **76**

Probability to meet client's expectations :

0

1

2

3

5



Part 3 **Production lines / Capacity**

Production Process						
Operation Name	Machine / Device Name (if no, "NO")	Machine count	Nb of Workers for this step	Nb of Workers / Machine	Nb pcs / Hour / Machine (1 Pc = 1 Final Unit Product)	Total Step Capacity (Pcs per week)
SMT PCBA	Integrated SMT Machine	9 (8 in use)	24	3	Theoretical: 500 Pcs / Hour Actual (60%): 300 Pcs / Hour	30 000 Pcs/Week (On a 30 H/week basis for full production time)
DIP	DIP Machine	4 (2 in use)	37	3	Theoretical: 400 Pcs / Hour Actual (60%): 250 Pcs/ Hour	25 000 Pcs/Week (On a 30 H/week basis for full production time)
Assembly / Packing	Manual Line	3 – 5 complete lines	76	-	Theoretical: 80 - 100 pcs / Hour Actual (60%): 50 - 60 pcs / Hour	5000 – 7500 Pcs /Week

OVERALL CAPACITY = Minimum Step Capacity (Pcs per week):

The factory has the capacity to product: 7 500 Pieces / week



Daily output check (first check when arriving in factory – last check when leaving):				
Is there a running production in the factory during the Audit	? Yes	Description of the product: 7 inch Tablet PC (30*16*4 cm)		
Picture(s)				
START	FINISH	Check total time		
at 14 : 00 (indicate hour)	at 15 : 40 (indicate hour)	1h 40min		
Raw material	Raw material	Daily Consumption		
Available Not applicable (inside the machine)	Available Not applicable (inside the machine)	-		
Finished products	Finished products	Daily Output		
Available 13 Pcs	Available 101 Pcs	88 pcs / 1h 40min		



Lead times for client's production:					
According to	Auditor check				
Raw material supply capacity:	Stock Management Process no shortage Raw material delivery 1 weeks				
Production weekly capacity:	6500 pcs/Week for tablet pc	Accurate according to check			

Sensitive	points /	Bottlenecks

According to factory:

No problems mentioned

According to auditor check:

The factory could increase it's production (about 40%) by hiring new workers, since 2 additional production line aren't in use.

General comments from auditor about production process

The factory seems to have a big technical capacity for simply designed tablet pc, but didn't show us specific facilities for any technical product.

Probability to meet client's expectations

1

0

(

2

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4

5



Part 4 Factory Facilities / Machinery Conditions

Machines for p	oroduction		
Machine Name, Brand, Country of Origin	Picture	Count	Comments (machines conditions and age, location in the factory,)
Wave Soldering Origin: Taiwan	LEAD FREE-Scoring States	4	New machines (<2years old)
Microscope Inspection Origin: Taiwan		4	we didn't get the age Still in use



Machines for production			
Machine Name, Brand, Country of Origin	Picture	Count	Comments (machines conditions and age, location in the factory,)
SMT Reflow Machine Origin: Taiwan		3	new machines (we didn't get the age)
Lead-Free Solder		2	Half CNC, half manual
	为Atim 24 以 35 位		



Warehouse condition

Picture(s)

Comment(s) / please pay attention to the cartons in the warehouse (Quantity, product, client...)





The company "cool device" seems actually to be the major customer (25% of the cartons: about 50 Palettes). Currently.

Those products are mainly plastic boxes.



About 20% of the cartons

Estimated warehouse capacity:

400 Palettes



Sample room condition

Picture(s)



Comment(s)

Most of the finished products are tablet pc



Also 7 inch ones



Show room



Public power supply		
Connected ?	Frequent Power Outage in the area? (Ask several people: workers & management)	
YES	YES (about twice a week!)	
Electric Power Generator		
Picture(s)	Comment(s)	
	According to the factory, while running only the Power Generator (in case of Blackout), production capacity is about 20% less than connected days.	

Transportation vehicle		
Picture(s)	Comment(s)	
No trucks available during Audit	3 Trucks belong to the factory, and car be used for delivery.	

Delivery / Loading conditions	FOB
Nearest port / airport	Shenzhen (1h drive) & Hong Kong (3h) port or airport

Probability to meet client's expectations	0	1	2	3	4	5



Part 5 Quality Assurance System & Related Certificates

Export license	
Date of the license:	
Picture(s)	Comments:
#10 0	
本事 年 年 年 日本	

Quality system managemen		
ISO9000 series:	Yes	Comment: ISO 9001:2000
Others:		Comment:
None:		



Inspection track record How often is it updated? Last inspection by QC company (date) Picture(s) Comments: AQL inspection (Within AQL)



QC		
QC staff count	5 persons	
Picture(s)		Comments:
		QC Department
	MASSAS O	QC records
The same of the sa		AQL table



In line QC	
Is there In-line QC?	YES
How is the inline QC setup?	SMT: Visual check on each machine (3 staff / machine) Assembly: At the end of each line (2 staff/line)
List of testina eauipment	Visual check
Record / reports available? Picture(s)	YES



Final QC	
Is there Final QC?	YES
List of testing equipment	Microscope, X-Ray Testing System device
Record / reports available?	YES
Last results / record	Every day
Picture(s)	



Incoming QC			
Is there an Incoming QC?	YES		
List of testing equipment	Quantity check (in Raw Materials warehouse)		
Record / reports available?	YES		
Picture(s)	(株式 日本 19 mart 20 (10 m) 10 m m m m m m m m m m m m m m m m m m		

Probability to meet client's expectations: 0 1 2 3 4 5



Part 6 Social Accountability

_abor	
Reference Standard:	
SA8000	

Acco	ording to:	Manager	Employees	Visual check
1	Child labor	No worker under 18	No worker under 18	No worker under 18
	Standard :	PRC labor law		
	Result - Comments :	No violation found (ID	checked)	
2	Forced labor	No	-	-
	Standard :	PRC labor law		
	Result - Comments :			
3	Base Salary / compensation	1000 RMB/M	1250 RMB/M	820 -1700 RMB/M
	Standard :	850RMB/M		
	Result - Comments :	Factory pays the strict	minimum and pays O	Т.



Acc	ording to:	Manager	Employees	Visual check	
4	Working Hours	5 days (8h/day) 8:00 – 12:00 1:30 – 5:30	Over Time >2h every night Over Time on Saturday	-	
	Standard :	PRC labor law			
	Result - Comments :	Violation of OT allowance			
5	Overtime Regulations	Paid x1.5 at night Paid x2 on weekend	Not paid at all	-	
	Standard :	PRC labor law			
	Result - Comments :	OT paid			
6	Association / Discrimination / Coercion	No	-	-	
	Standard :	PRC labor law			
	Result - Comments :				

Interviewed Workers Pictures





N.0549 N.0835



交易權 交入十 資工 罗伯亚母 交出性 交入十 河工 萨伯贝维 小心 交易學 安人十 新工 伊伯亚斯 年 本
2007 8
200 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	Comments	Pictures
Canteen/Drinking/Kitchen facilities		
Emergency medical		急救药箱 PIRAT A1D ROX



Dormitory conditions	6 persons in 25m2 room	
Fire prevention		A A A STATE OF THE
Safety conditions		消防箱 火管室119

Probability to meet client's expectations

0

2

3

4

5



Part 7 Supply

Raw materials				
Who are the suppliers of raw material?				
Material	Supplier name	Country of origin / location		
PCB	xxxxx			
LCD	xxxxx	Taiwan (2 weeks shipment)		
ABS	xxxxx	Shen zhen (1 weeks		
HiPS	XXXXX	shipment		

Sub-contracting					
What part of the production process is sub-contracted?					
Production step (ex: packaging)	Supplier name	Country of origin / location			
No subcontracting for any prod step		-			
In case of overload (never happened yet).	Can subcontract to "xxxxx", a bigger factory	Shenzhen (as well)			

Probability to meet client's expectations :	0	1	2	3	4	5



Part 8 R & D / Sampling capacity

R & D facilities	
Specific staff count:	8 Pers for Mold design – 4 Pers for samples/mokup
Specific facilities:	8 computers (CADesign with Pro-Engineer, one of the best CAD tools)
(sample production line or equipment)	Laser measurement lab for mokups and molds
	Machinering line, unused machines in workshop
Sample Production Process Description	No info – depends on product
Picture(s)	
Approval sample lead time:	According to factory, 45 days for sample

Probability to meet client's expectations : 0 1 2 3 4 5



Part 9 Hygiene / Security

Facilitie					
First aid supply	Yes	Yes			
Time to the nearest medical facility	5 min Walking				
Workers (appropriate) protective equipment	List: Yes	Comments: Seems to be appropriate			
Fire protection facilities	List: Fire extinguishers Fire water facilities	Comments: Seems to be appropriate			
D/ / /)					

Picture(s)









First aid training	No	Comment: No
Fire evacuation drills	Yes	Comment: Yes

Probability to meet client's expectations :

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Part 10 **Environment**

Environment management							
ISO14000 series:	No	Comment:					
Environment Policy Available	YES	Description:					
No certification :							
List of certificates available	Only a certificate from Local Environment Bureau						
Picture(s)							
Staff in charge (name and mission)	none						
Picture(s)	none						



Control track re	ecord		
How often is it updated?		none	
Item checked	Last control date	Findings	Standard
	Last control date	Findings	Statidatu
none			
Picture(s)			
	none		
Preventive / co	rrective actions		
	e, Smokes, Noise, Waste, and		
Description		Comments	
none			
Picture(s)			
(1)			
L			
Probability to med	et client's expectations :	0 1 2	3 4 5
11. 11. 11. j			<u> </u>



Part 11 Special Requirements from Client

Special standard to refer to								
Standard name				Comr	nen	t		
Other requirements								
1.								
Does the factory have the facilities and (sample provided) and to check the following the should be able to guaranty a considuring 20 seconds, with a loss of pressure below 0.2mbar. What are the equipments in the factory	owings:	•	J	ital ph	oto 1	frame		
							nt to a	specialize
Probability to meet client's expectati	ons :	0	1	2)	3	4	5
2.								
Did the factory already product such te Which ones? What is their capacity to develop a new	•		nnical	specifi	icatio	ons?		
↑ The factory has produced such a The closest product they did was a good facilities and software. The fa	syringe. E	3ut th	e R&I	O depa			ems to	have ve
Probability to meet client's expectati		0		2			4	5



Part 12 Synopsis of major facts and problems found

Capacity of manufacturing client's product: Very bad Bad Average Good Very good

Comments:

The factory has **no experience** in the field products which require **pressure control**.

However they have an interesting production capacity concerning plastic products in general, including a design department which has **good equipment and software**.

Production conditions:						
(machines, building, employees training, internal quality control)						
Very bad	Bad	Average	Good	Very good		
Comments:						

The production facilities, the building, and the QC are correct. Not every employee look very well trained (assembly line), but the staff who works on **very technical equipment** (injection, Computer Aided Design) has a good training.

Factory behavior during audit:						
Variable d	D. J	2001	V			
Very bad	Bad	Average	Good	Very good		
Comments:						
The factory manag	ement let us copy all	documents require	ed, interview worke	rs. They answered all		
questions.						
Good behavior dur	ing Audit.					

END