

Chroma

Your Testing Quality is Our Commitment.

CHROMA ATE INC.

2014

Test
turnkey **Auto** nation
Solution provider

5th August, 2014

This presentation contains some forward-looking statements that are subject to substantial risks and uncertainties. Typically, these statements contain words such as “anticipate”, “believe”, “could”, “estimate”, “expect”, “intend”, “plan”, “forecast”, “project”, “predict”, “potential”, “continue”, “may”, “should”, “will”, and “would” or similar words. You should consider these forward-looking statements carefully because such statements are only our expectations or projections about future events, and actual results may differ materially from those expressed or implied by such statements. The forward-looking statements in this presentation include, but are not limited to, growth rates for various markets estimated by third party sources, future products and technology development, widespread market acceptance of the hosted delivery model, future revenue growth and profitability. You should be cautioned that the forward-looking statements are no guarantee of our future performance. The forward-looking statements contained in this presentation are made only as of the date of this presentation and we undertake no obligation to update the forward-looking statements to reflect subsequent events or circumstances, except as required by law. This presentation and the information contained herein are the property of Chroma Ate Inc.

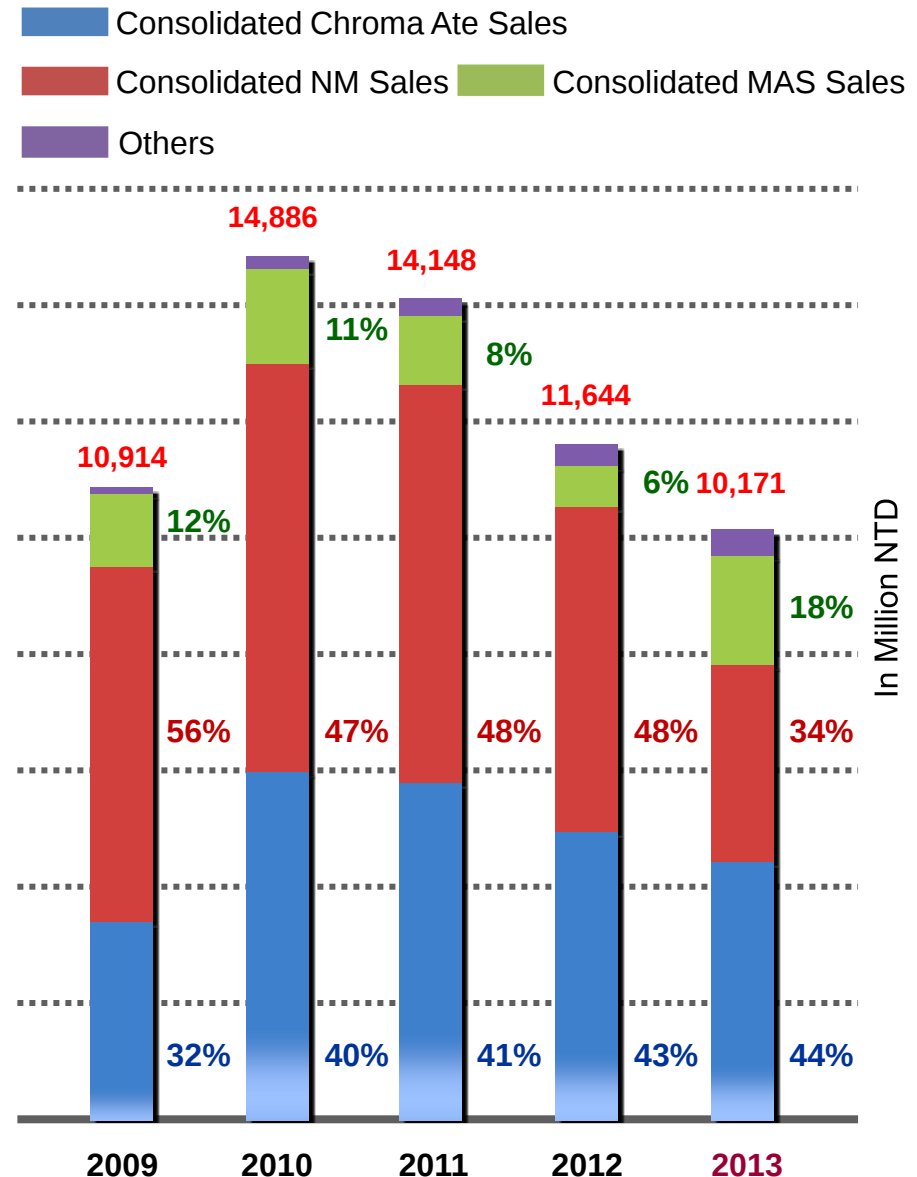
- **Corporate Profile**
- **Financial Review**
- **Operation Highlights**
- **Q&A**

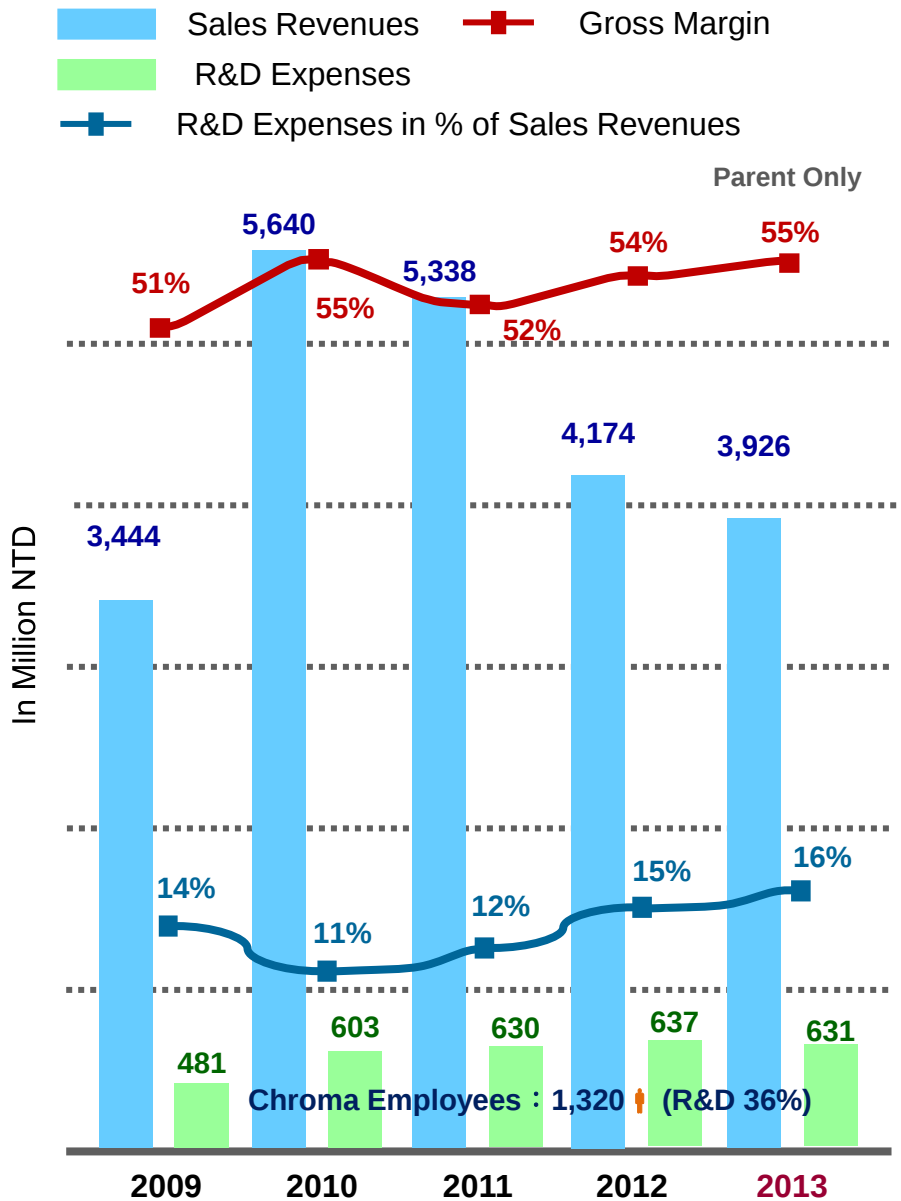
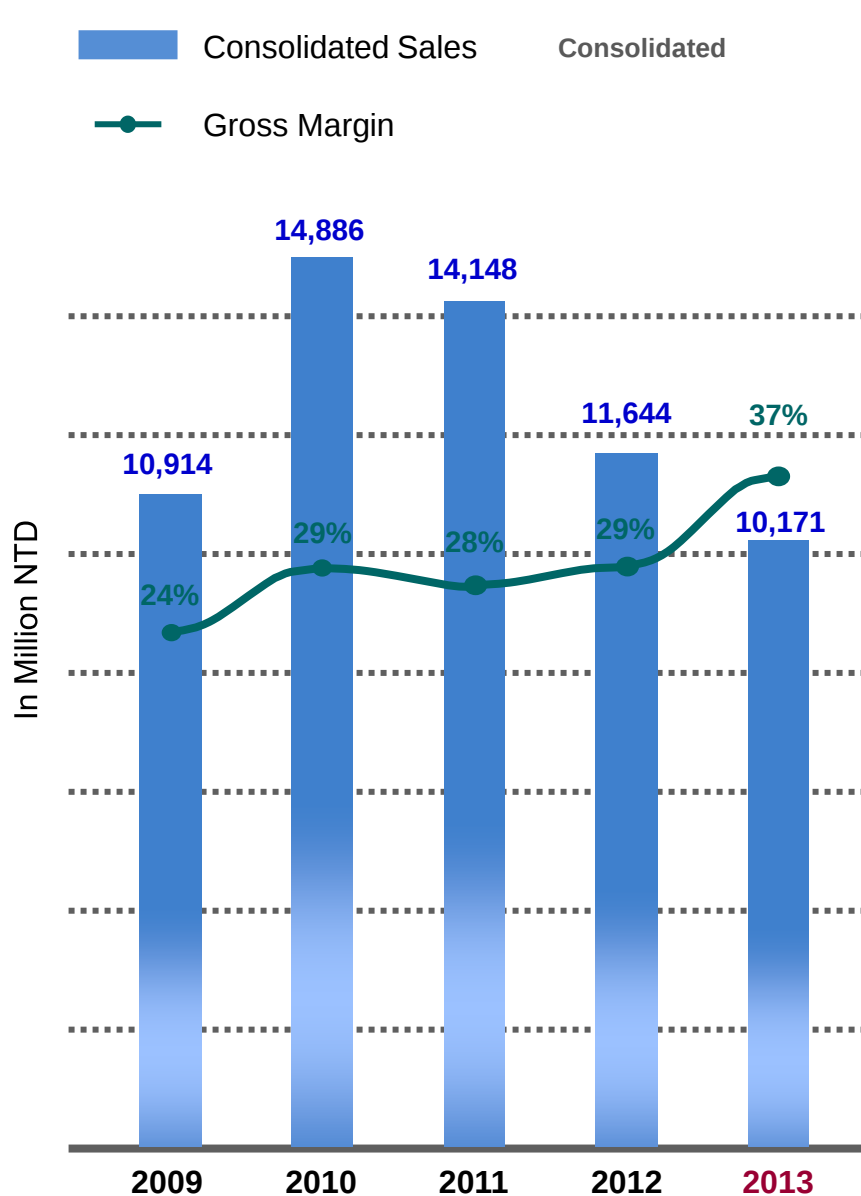
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CORPORATE PROFILE

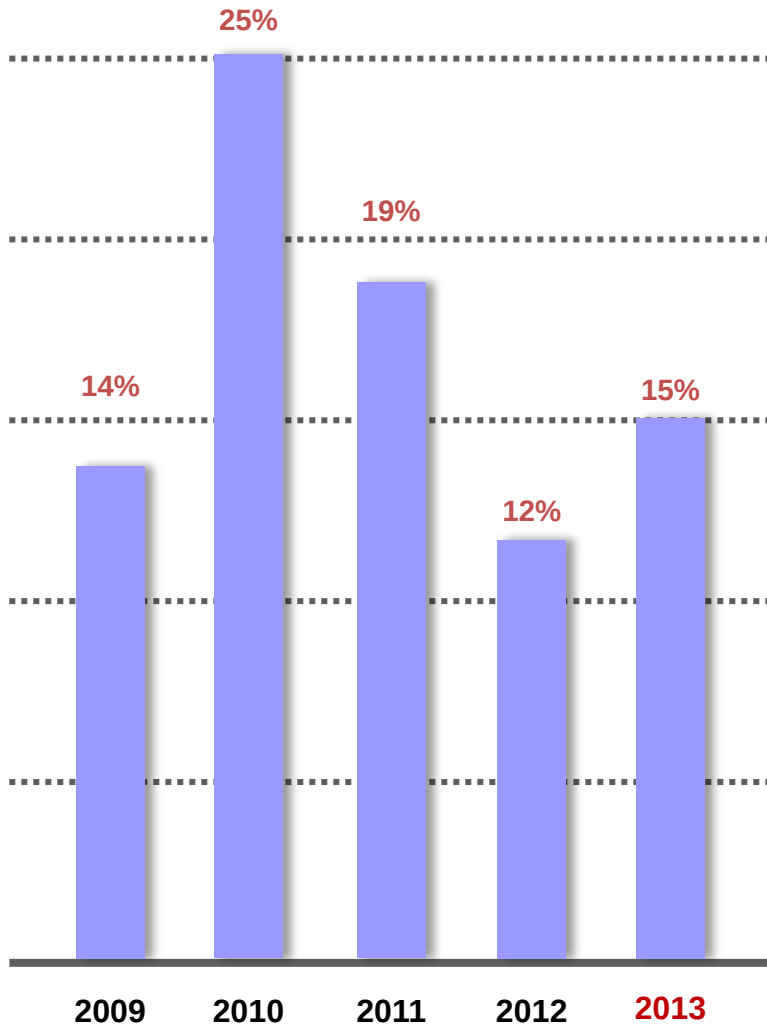
Test
turnkey **Auto** **mation**
Solution
provider

- Chroma Group founded in 1984, a world leading own brand turnkey test & automation solution provider, specialized in electronics test and measurement instruments and ATS (auto test system). Businesses cover test and measurement instruments and ATS for various industries, and a turnkey solution of an integration of Test and Measurement , Automation and MES (manufacturing execution system).
- Key success: Precision, Reliability, Innovation
- Chroma group encompass business unit of Chroma Ate Inc., Modular Assembly System (MAS) and Chroma New Material Corp (NM).
- 2013 Consolidated Sales : NT\$10.17 billion
- 2013 Net Income: NT\$1.21 billion
- Chroma Group total of 2,179 employees (as June, 2014)

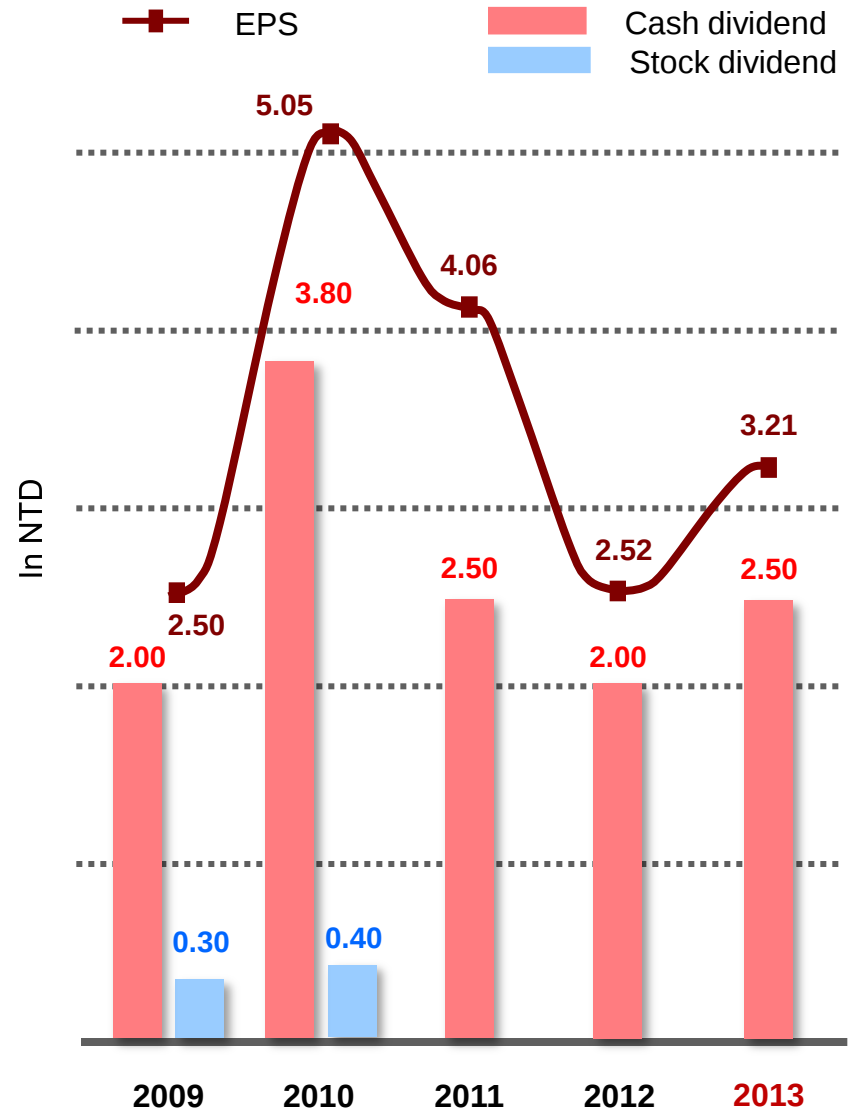




ROE



Dividend



Global Employees : 2,179 🧑 , Branch Offices x16, Distributors x58, Subsidiaries x6



FINANCIAL REVIEW

Year 2014.1H Condensed Consolidated Income Statement

<u>Condensed Consolidated P&L</u> (In Million NTD, except for EPS in NTD)	<u>2014.1H</u>	%	<u>2013.1H</u>	%	YoY %
Net Sales	4,634	100.0%	5,055	100.0%	(8%)
Consolidated Sales of Testing Business	2,534	54.7%	1,934	38.3%	31%
Consolidated Sales of MAS	295	6.4%	1,103	21.8%	(73%)
Consolidated Sales of New Material	1,579	34.0%	1,800	35.6%	(12%)
Others	226	4.9%	218	4.3%	4%
Cost of Goods Sold	(2,877)	(62.1%)	(3,087)	(61.1%)	(7%)
Gross Profit	1,757	37.9%	1,968	38.9%	(11%)
Operating Expenses:					
General & Administration	(897)	(19.4%)	(967)	(19.1%)	(7%)
Research & Development	(381)	(8.2%)	(341)	(6.7%)	12%
Operating Income	479	10.3%	660	13.1%	(27%)
Non-Operating Income (Expenses), net	109	2.4%	102	2.0%	7%
Income (Loss) Before Tax	588	12.7%	762	15.1%	(23%)
Income Tax	(89)	(1.9%)	(120)	(2.4%)	(26%)
Net Income	499	10.8%	642	12.7%	(22%)
Other Comprehensive Income (Losses)	(35)	(0.8%)	140	2.8%	n/a
Comprehensive Income	\$ 464	10.0%	\$ 782	15.5%	(41%)
Net Income (Losses) Attributable To:					
Shareholders of the Parent	511	11.0%	647	12.8%	(21%)
Noncontrolling Interests	(12)	(0.2%)	(5)	(0.1%)	n/a
	\$ 499	10.8%	\$ 642	12.7%	(22%)
EPS (Basic)	\$ 1.36		\$ 1.73		(21%)

Balance Sheet Highlights & Financial Ratio

Consolidated (In Million NTD)

2014. June

2013. Dec

+ / - %

Balance Sheet Highlights

Cash & Short Term Investments	4,488	2,364	90%
Inventory	1,754	1,531	15%
Short Term Debt	189	794	- 76%
Long Term Debt	2,674	819	n/a
Shareholders Equity	8,398	8,717	- 4%
Total Assets	15,367	12,768	20%

Inventory Turnover (Day)	103	88
AR Turnover (Day)	115	102
AP Turnover (Day)	97	86
Net Debt to Equity (%)	-	-

ROE (%) ●	12%	15%
ROA (%) ●	7%	10%

Cash Position

2014.1H

2013.1H

YoY

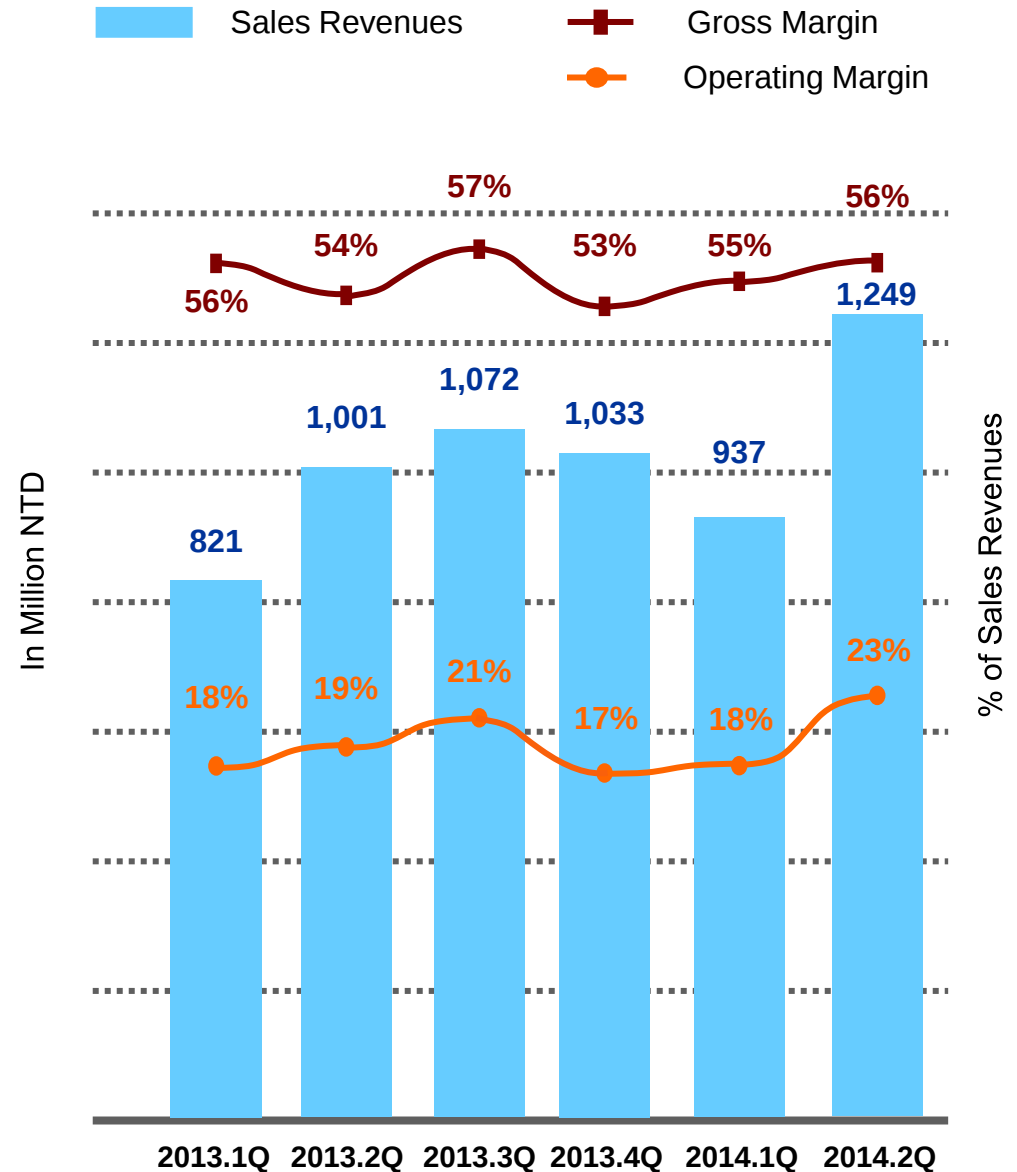
EBITDA	743	925	(20%)
Cash Flow from Operation	825	816	1%
Free Cash Flow ●●	(1,105)	348	n/a

● All ROE + ROA has been annualized.

●● Free Cash Flow = Net Cash Provided by Operating Activities + (Net Cash used by Investing Activities)

2014.2Q Key Points

- Sales Revenue: \$ 1,249 million, up 33% QoQ, up 25% YoY
- Gross Margin: 56%
- Operating Margin: 23%
- Net Income: NT\$ 333 million, up 87% QoQ, down 22% YoY
- 2014.2Q Highlights:
 - In the second quarter sales revenues growth was mainly contributed from Semiconductor Test Solutions and Turnkey Solutions particularly in solar testing applications.



Year 2014.2Q Condensed Income Statement

Condensed P&L – Parent Only (In Million NTD, except for EPS in NTD)	2014.2Q	%	2014.1Q	%	QoQ %	2013.2Q	%	YoY %
Net Sales	1,249	100.0%	937	100.0%	33%	1,001	100.0%	25%
Cost of Goods Sold	(546)	(43.7%)	(421)	(44.9%)	30%	(457)	(45.6%)	19%
Gross Profit	703	56.3%	516	55.1%	36%	544	54.4%	29%
Operating Expenses:								
General & Administration	(236)	(18.9%)	(183)	(19.5%)	29%	(198)	(19.8%)	19%
Research & Development	(179)	(14.3%)	(162)	(17.3%)	10%	(156)	(15.6%)	15%
Operating Income	288	23.1%	171	18.3%	68%	190	19.0%	52%
Non-Operating Income (Expenses), net	91	7.3%	31	3.3%	194%	264	26.4%	n/a
Income (Loss) Before Tax	379	30.4%	202	21.6%	88%	454	45.4%	(17%)
Income Tax	(46)	(3.7%)	(24)	(2.6%)	92%	(25)	(2.5%)	84%
Net Income	\$ 333	26.7%	\$ 178	19.0%	87%	\$ 429	42.9%	(22%)
Other Comprehensive Income	(83)	(6.7%)	47	5.0%	n/a	78	7.8%	n/a
Comprehensive Income	\$ 250	20.0%	\$ 225	24.0%	11%	\$ 507	50.7%	(51%)
EPS (Basic)	\$ 0.88		\$ 0.48		83%	\$ 1.15		(23%)

Non-operating Income included 100% owned subsidiaries' income - New Material: 12m (QoQ ↓ 29%, YoY ↑ 20%), MAS: 20m (QoQ ↑ 122%, YoY ↓ 90%).

Year 2014.1H Condensed Income Statement

Condensed P&L – Parent Only (In Million NTD, except for EPS in NTD)	2014.1H	%	2013.1H	%	YoY %
Net Sales	2,186	100.0%	1,822	100.0%	20%
Cost of Goods Sold	(967)	(44.2%)	(820)	(45.0%)	18%
Gross Profit	1,219	55.8%	1,002	55.0%	22%
Operating Expenses:					
General & Administration	(419)	(19.2%)	(368)	(20.2%)	14%
Research & Development	(340)	(15.6%)	(298)	(16.4%)	14%
Operating Income	460	21.0%	336	18.4%	37%
Non-Operating Income (Expenses), net	121	5.5%	358	19.7%	(66%)
Income (Loss) Before Tax	581	26.5%	694	38.1%	(16%)
Income Tax	(70)	(3.1%)	(47)	(2.6%)	49%
Net Income	\$ 511	23.4%	\$ 647	35.5%	(21%)
Other Comprehensive Income	(35)	(1.6%)	140	7.7%	n/a
Comprehensive Income	\$ 476	21.8%	\$ 787	43.2%	(40%)
EPS (Basic)	\$ 1.36		\$ 1.73		(21%)

● Non-operating Income included 100% owned subsidiaries' income - New Material: 29m (YoY ↑ 32%), MAS: 29m (YoY ↓ 88%).

Balance Sheet Highlights & Financial Ratio

Parent Only (In Million NTD)

2014. June

2013. Dec

+ / - %

Balance Sheet Highlights

Cash & Short Term Investment	2,570	406	n/a
Inventory	1,392	1,174	19%
Short Term Debt	3	630	n/a
Long Term Debt	2,552	700	n/a
Shareholders Equity	8,270	8,578	- 4%
Total Assets	13,483	10,989	23%

Inventory Turnover (Day)	239	231
AR Turnover (Day)	149	149
AP Turnover (Day)	110	84
Net Debt to Equity (%)	-	11%

ROE (%) ●	12%	15%
ROA (%) ●	8%	12%

Cash Position

2014.2Q

2014.1Q

QoQ

2014.1H

YoY

EBITDA	419	240	75%	659	(14%)
Cash Flow from Operation	285	354	(20%)	639	19%
Free Cash Flow ●●	(1,525)	332	n/a	(1,192)	n/a

● All ROE + ROA has been annualized.

●● Free Cash Flow = Net Cash Provided by Operating Activities + (Net Cash used by Investing Activities)

Chroma

OPERATION HIGHLIGHT

Test
turnkey **Auto** **mation**
Solution
provider

Chroma Ate Inc. Sales Breakdown By Testing Solution

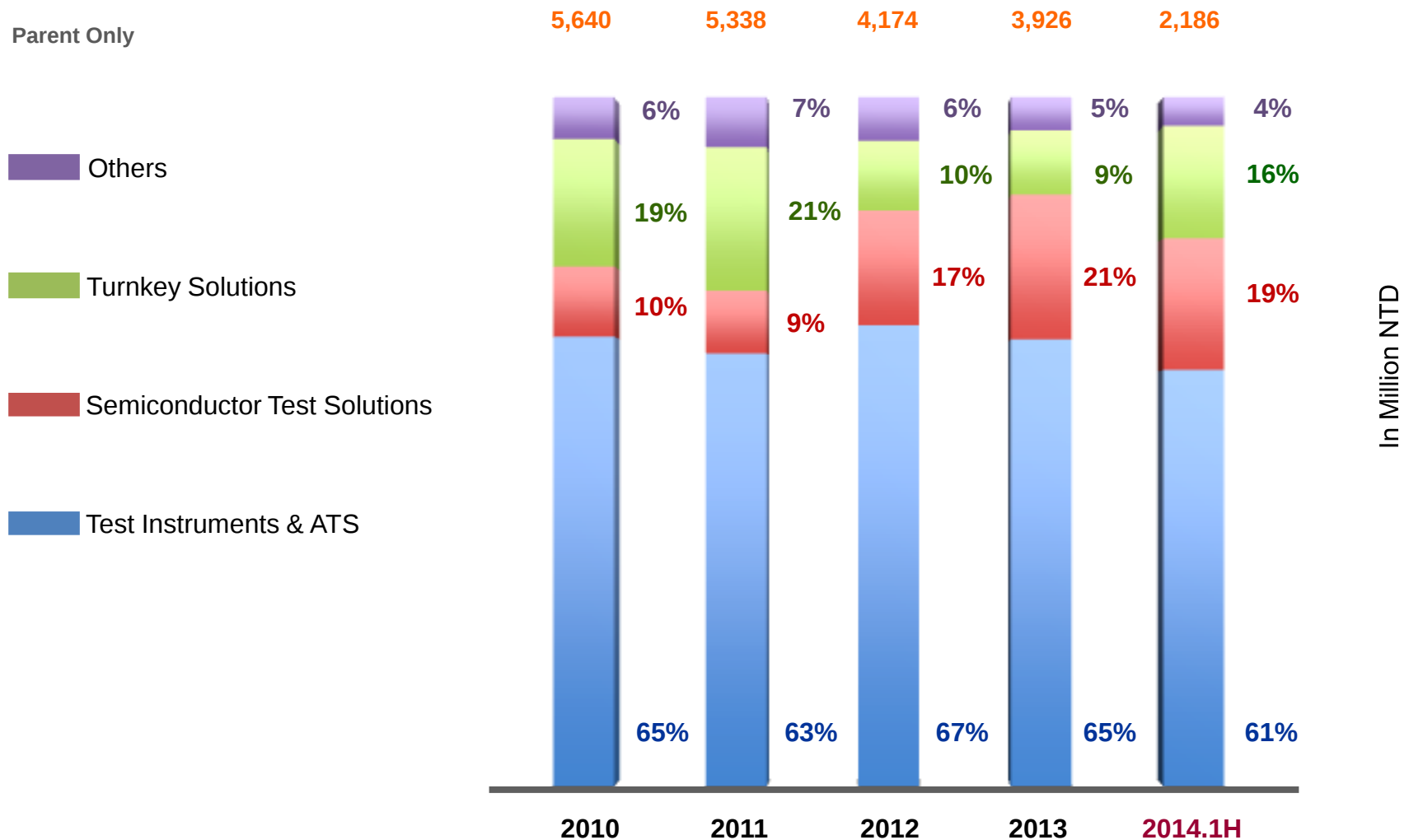
(Unit: Million NTD)	<u>2014.2Q</u>	<u>%</u>	<u>2014.1Q</u>	<u>%</u>	<u>QoQ</u>	<u>2013.2Q</u>	<u>%</u>	<u>YoY</u>
Test Instruments & ATS	734	58.7%	594	63.4%	24%	687	68.6%	7%
Semiconductor Test Solutions	260	20.8%	158	16.8%	65%	206	20.6%	26%
Turnkey Solutions	203	16.3%	146	15.6%	39%	62	6.2%	227%
Service & Others	52	4.2%	39	4.2%	33%	46	4.6%	13%
Total	1,249	100.0%	937	100.0%	33%	1,001	100.0%	25%

Consolidated Sales Breakdown by Quarter

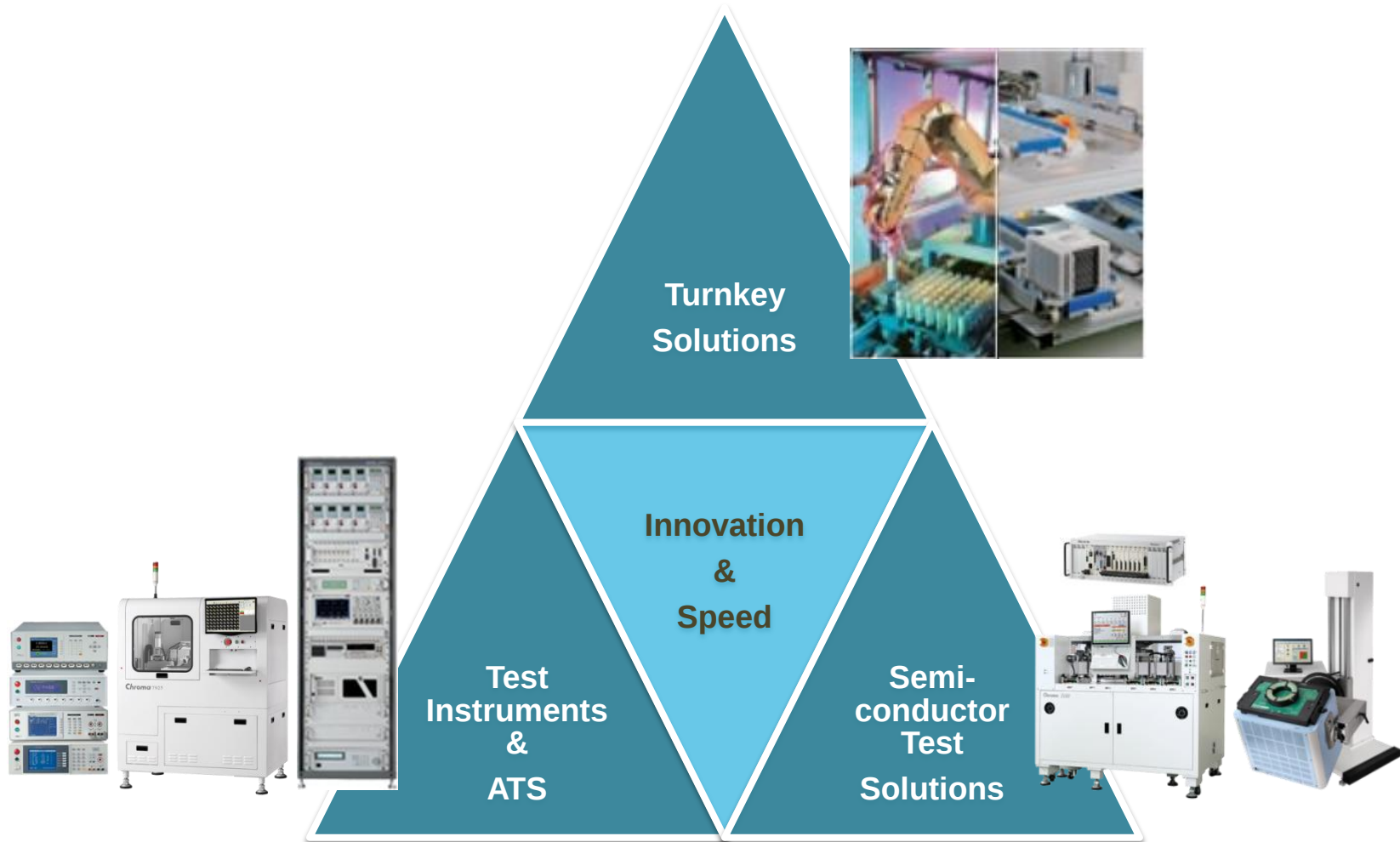
(Unit: Million NTD)	<u>2014.2Q</u>	<u>%</u>	<u>2014.1Q</u>	<u>%</u>	<u>QoQ</u>	<u>2013.2Q</u>	<u>%</u>	<u>YoY</u>
Chroma Ate. Inc. ** included overseas affiliates	1,466	55.8%	1,081	53.9%	36%	1,186	41.0%	24%
MAS	186	7.1%	96	4.8%	94%	684	23.7%	(73%)
New Material	851	32.3%	728	36.3%	17%	903	31.3%	(6%)
Others	125	4.8%	101	5.0%	24%	115	4.0%	8%
Consolidated Sales	2,628	100.0%	2,006	100.0%	31%	2,888	100.0%	(9%)

** Adjustments & Eliminations are mainly intercompany transactions and net to Chroma ATE.

A Turnkey Solution and Intelligent Automation Line Provider



- In the second quarter 2014, the Chroma parent sales revenues presented a growth of 33% QoQ, hit the highest quarterly sales for the past six quarters. This was mainly contributed from Semiconductor Test Solutions and Turnkey Solutions, which represented a growth of 65% and 39% QoQ respectively, while Test Instruments & ATS also presented a steady growth of 24% QoQ.
- The Company expects another sales revenues growth in the third quarter, especially the Turnkey Solutions would be a major contribution in second half.
- Aggressively penetrated and qualified by global top-tier customers through competitive R&D capabilities and well established global support network.
- The growth of year 2014 is expected to come from Chroma Ate business entity, particularly in Turnkey Solutions and Semiconductor Test Solutions, while the Test Instruments & ATS will maintain a solid position from enhanced power electronic applications, such as 4G LTE, servo power and clean tech related.



Test Instruments & ATS

4K Video Pattern Generator



New

(Model: 2235)

- ✓ High speed graphic engine support up to 4K x 2K ultra high resolution display test
- ✓ Comply with Display Port / HDMI standard
- ✓ Support 3D standard

FPD AOI System



New

(Model: 7661)

- ✓ Detection items: dot defect, line defect, etc.
- ✓ Applies to small and medium size display
- ✓ Integrated with video pattern generator or LCM ATS in one click to complete all measurements

Regenerative Grid Simulator



New

(Model: 61800)

- ✓ Inverter/ battery inverter/ EV charger for smart grid application
- ✓ Bi-directional AC source (4-quadrant)
- ✓ High power 60kVA (1 & 3-phase output)
- ✓ Parallelable up to 300kVA

Impulse Winding Tester



New

(Model: 19301)

- ✓ Test inductance range : 0.1uH~100uH
- ✓ Test voltage range : 10V~1000V; sampling resolution 0.25V
- ✓ Contact check by inductance measuring
- ✓ High test speed: < 40mS (Pulse 1.0)

Battery Charge & Discharge Test System



New



Energy
Recycling
Technology

(Model: 17011)

- ✓ Battery capacity and DCIR test
- ✓ EDLC capacitance and DCR
- ✓ Driving cycle simulation
- ✓ Cycle life test
- ✓ 5V, 20A, 90 channels

Battery Pack ATS



New

(Model: 8700)

- ✓ Initial checks
- ✓ Electrical tests
- ✓ CAN communication tests
- ✓ Performance test
- ✓ Final checks

Semiconductor Test Solutions

CIS VLSI Test & Handler Combo Solution



New

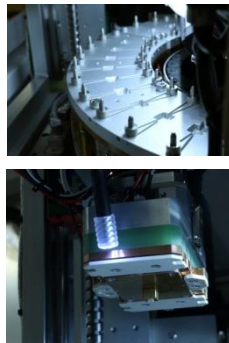
(Model: 3380P + 3270
CIS as combo solution)

- ✓ 3380P + 3270 CIS Combo Solution
- ✓ Bundled test cell including ATE, handler, light source & capture cards
- ✓ NTSC supported
- ✓ Application coverage including smartphone 5M/8M CIS, automotive CIS, and etc.

Full Range Active Thermal Control Handler



New



(Model: 3110-FT)

- ✓ High throughput tri-temperature test
- ✓ Full range ATC -40~125°C with soaking buffer
- ✓ Remote control operation
- ✓ Intelligent auto retest & auto re-tray

Turnkey Solutions

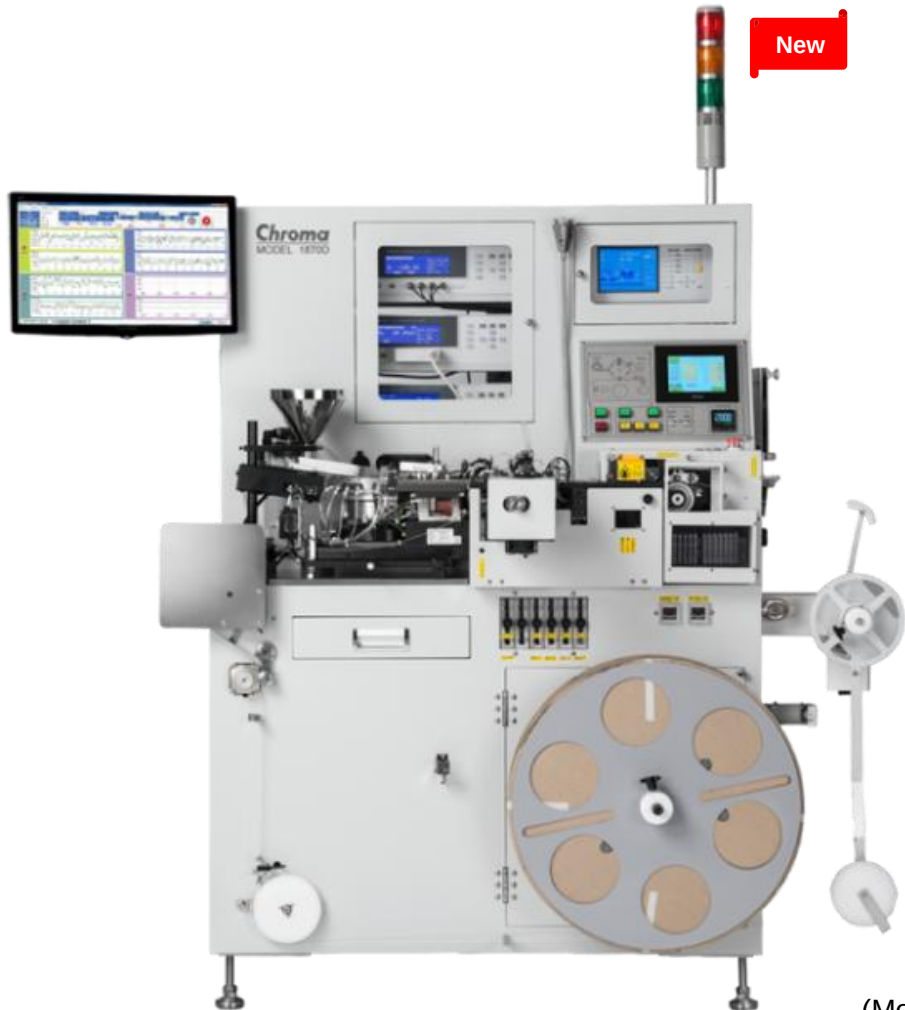




- ✓ Semi 4-terminals impulse winding test
- ✓ High through-put: Up to 1,400 pcs / min
- ✓ Cpk and quality control software

(Model: 1871)

Inductor Automatic Test & Packing System



(Model: 1870)

- ✓ High output speed: Up to 1,200 pcs / min
- ✓ DUT auto positioning for packing
- ✓ Cpk and quality control software
- ✓ Test Items :
 - Winding phase
 - Inductance, Q/ACR
 - Winding resistance
 - Impulse test (optional)

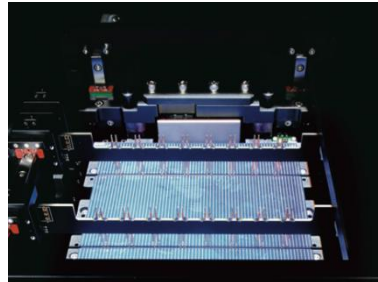


- ✓ High throughput: dual-lane sorter, 3,600/hr., >60megaW/yr
- ✓ Integrated with inspector and IV tester
- ✓ Modularized sorting bins
- ✓ Low breakage rate

(Model: 3760)



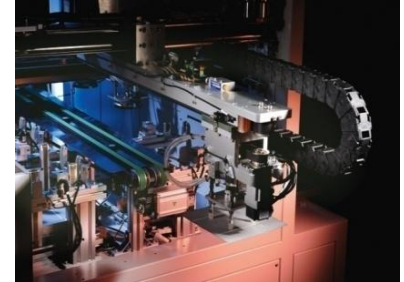
Sorting



IV Testing



AOI



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let's make a better world
Thank You!