



Semiconductor Manufacturing International Corporation

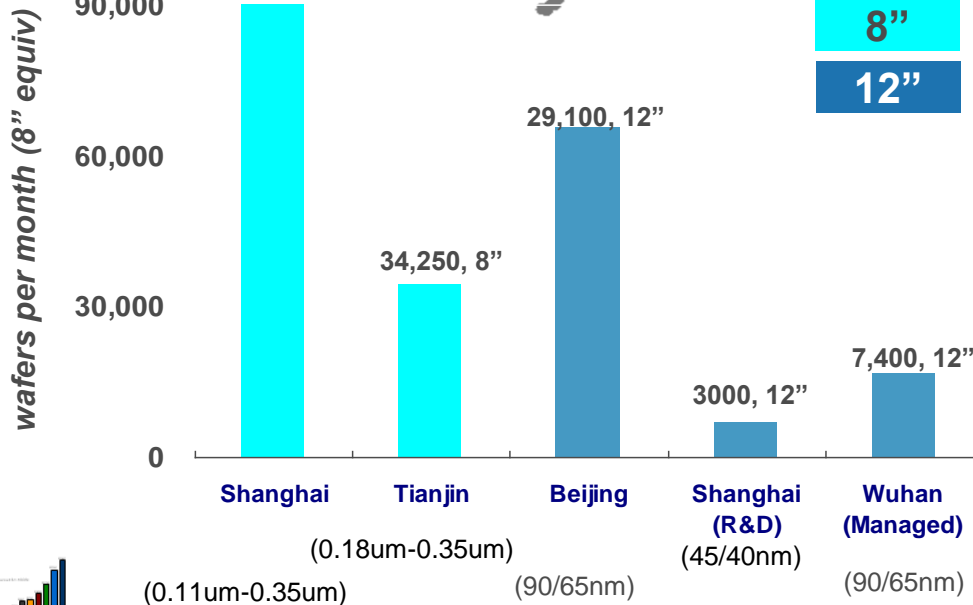
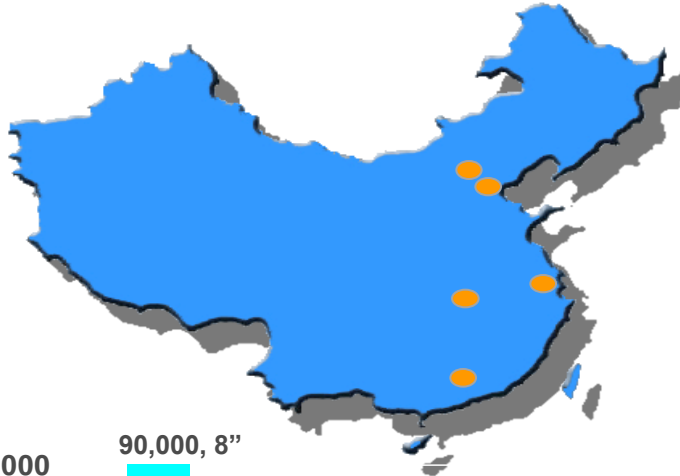
SMIC Presentation Before the US-China Hi-Tech Working Group

September 2011

SMIC, the Largest and Most Advanced Semiconductor Foundry in China

China Ranking: No. 1

Serving Globally



Dedicated Full Service Provider

Minimize cycle time



Design Services



Mask Making



Wafer Manufacturing

Smooth flow of logistics



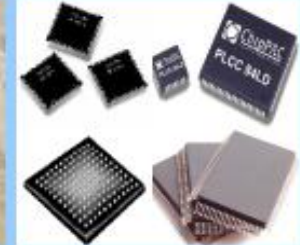
Flexible and customized solutions



Wafer Bumping



Wafer Probing



Assembly & Final Test

2010 Worldwide Pure-Play Foundry Ranking

Ranking	Company	Region	2010 Share	Cumulative Share
1	Taiwan Semiconductor Manufacturing Corporation (TSMC)	Taiwan	50.1%	50.1%
2	United Microelectronics Corporation (UMC)	Taiwan	15.1%	65.2%
3	Global Foundries	UAE / Singapore / Germany	13.9%	79.1%
4	Semiconductor Manufacturing International Corporation (SMIC)	China	6.0%	85.1%
5	Dongbu HiTek Co., Ltd.	South Korea	2.0%	87.1%
6	Tower Semiconductor Ltd.	Israel	2.0%	89.1%
7	Vanguard International Semiconductor Corporation	Taiwan	2.0%	91.1%
8	Shanghai Hua Hong NEC Electronics Company, Ltd. (HHNEC)	China	1.6%	92.7%
9	Systems on Silicon Manufacturing Co. (SSMC)	Singapore	1.3%	94.0%
10	X-FAB Semiconductor Foundaries AG (X-FAB)	Germany	1.2%	95.2%

Source: iSuppli, 2011

- Foundries are concentrated in the East (mostly Taiwan), serving customers mostly concentrated in the West (EU and US).

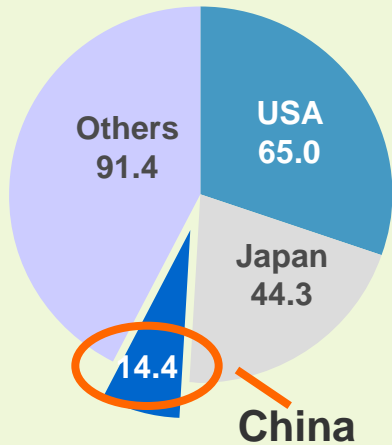


SMIC's Strategic Location: China, World's Largest IC Market

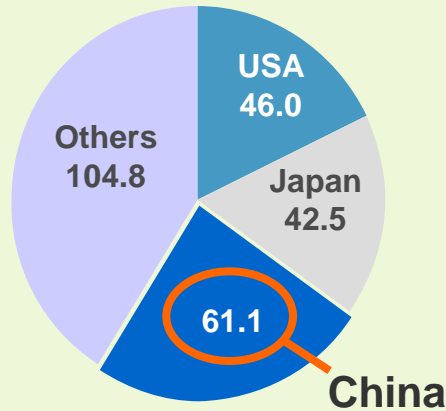


Worldwide IC Market by Region

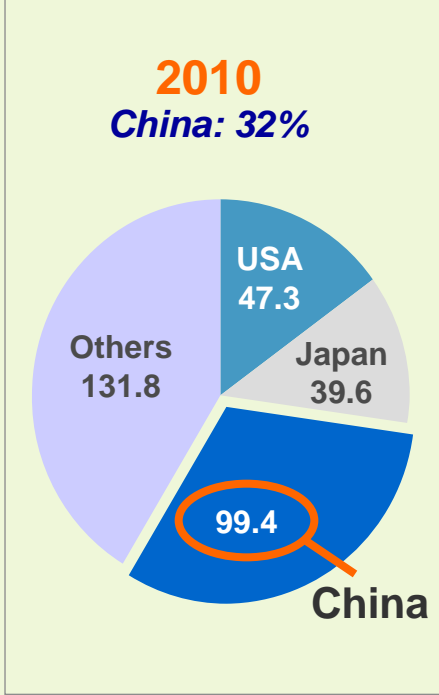
2000
China: 6.7%



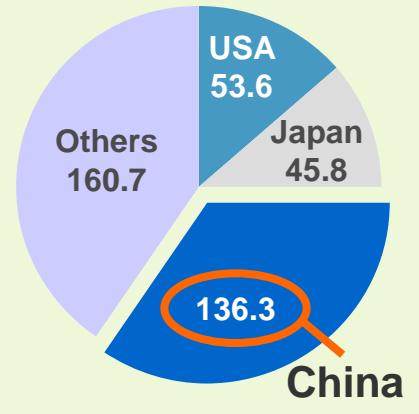
2005
China: 24%



2010
China: 32%



2015
China: 35% (E)



Unit: \$Billion

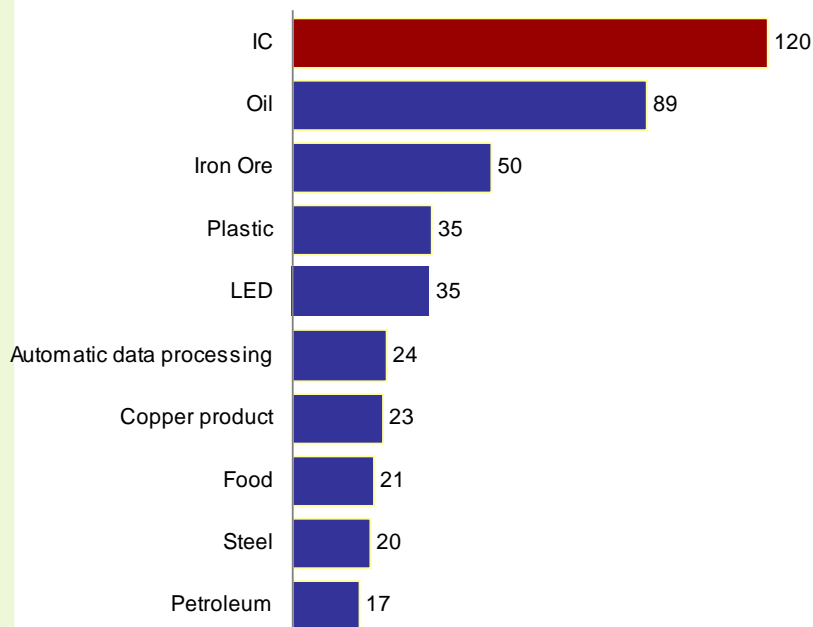
Source – iSuppli Corporation Global and China AMFT



SMIC's Strategic Location: China's Growing Opportunity

IC Dominates China Overall Imports: Major China Imports in 2009

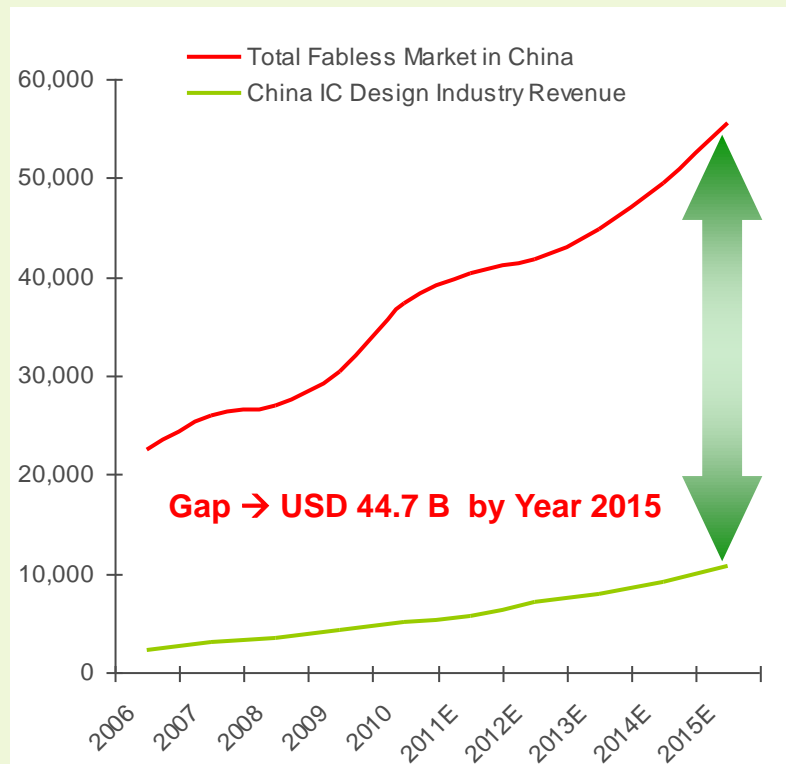
(US\$bn)



- China IC Imports > All Energy Imports (Including Oil + Petroleum)
- China IC Imports > All Major Commodity Imports (Including Iron Ore + Steel + Copper + Food)

China Market Local Demand & Supply Dynamics

(US\$mIn)



Source: iSuppli, Q2 2011



2010 Top 20 Fabless IC Cos.

2009 Rank	2010 Rank	Company Name	HQ Location	2009 Revenue	2010 Revenue	% Change
1	1	Qualcomm	USA	12818	14408	12%
3	2	Broadcom	USA	8634	13208	53%
2	3	AMD	USA	10314	12384	20%
5	4	Marvell Technology Group	USA	5394	7186	33%
4	5	MediaTek	Taiwan	6924	6804	-2%
6	6	Nvidia	USA	5202	5572	7%
7	7	Xilinx	USA	3400	4622	36%
9	8	Altera	USA	2390	3908	64%
8	9	LSI	USA	2726	3042	12%
11	10	Novatek	Taiwan	1634	2302	41%
10	11	MStar Semiconductor	Taiwan	1684	2114	26%
16	12	Atheros Communications	USA	1084	1854	71%
17	13	Omnivision	USA	1032	1654	60%
14	14	Aptina	USA	1294	1618	25%
13	15	Cambridge Silicon Radio	UK	1364	1602	17%
15	16	Realtek Semiconductor	Taiwan	1218	1414	16%
25	17	Seoul Semiconductor	Korea	690	1312	90%
12	18	Himax Technologies	Taiwan	1380	1286	-7%
18	19	PMC-Sierra	USA	992	1272	28%
93	20	Trident Microsystems	USA	168	1114	563%

Source: March 2011 Gartner Research Report Based Upon Estimates

- Fabless companies are concentrated in the US and Asia (mostly Taiwan). All their revenues depend on collaboration with foundries concentrated in Asia (mostly Taiwan).
- As foundries grow and increase capacity in Asia (including Mainland China), costs and efficiencies improve for the fabless companies (mostly the U.S.).

China IC Design (Fabless) Cos. Growing Stronger

Top 10 Chinese IC design companies

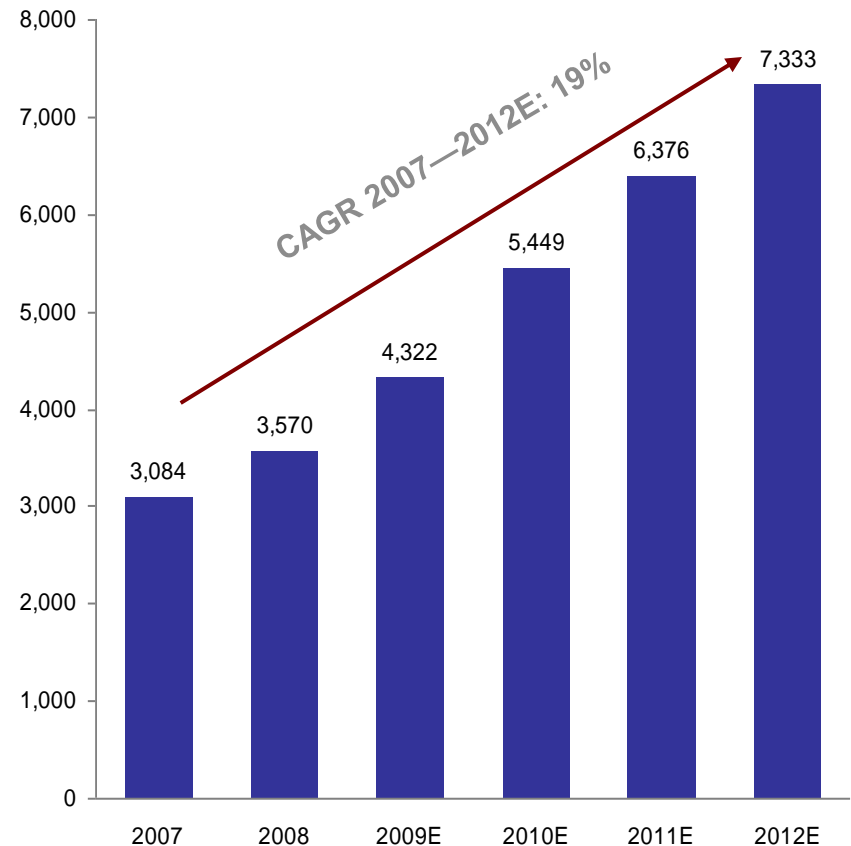
1st Half Revenue for 2011

Company	6 Mo. Revenue (\$M)
SPRD	346
Hisilicon*	344
RDA	192
Galaxycore	126
Telegent	125
Nationz	106
VIMICRO	97
Datang Microelectronics	93
Huada	81
Rockchip	77
Total	1587

Source: iSuppli, 2011

China IC design revenues

(US\$mm)



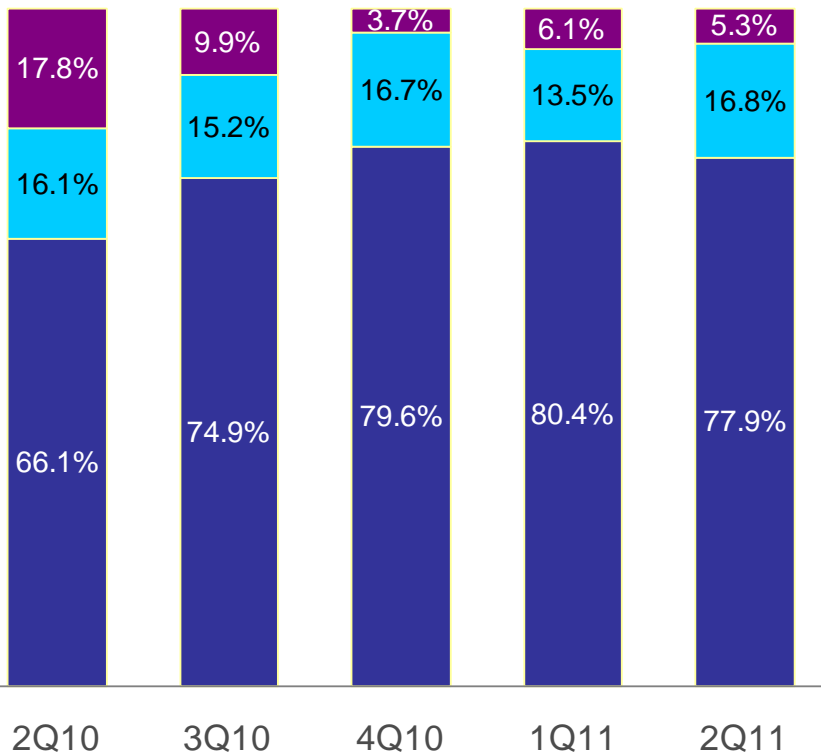
Source: CCID, iSuppli, 2008

Diverse Product Portfolio and Customer Base



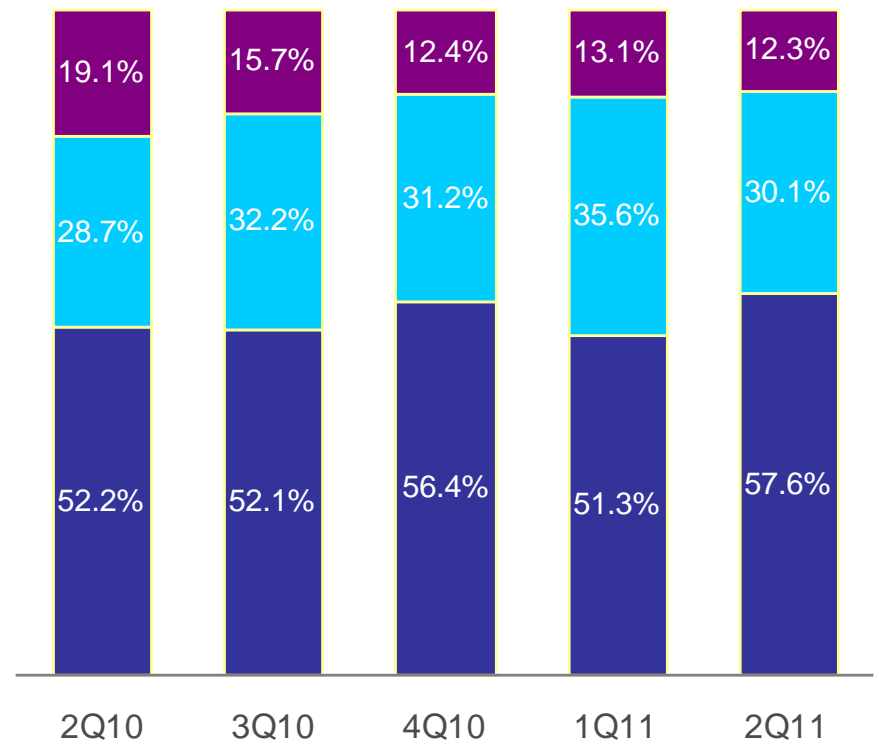
Revenue breakdown by customer type

■ Fabless ■ IDM ■ System companies

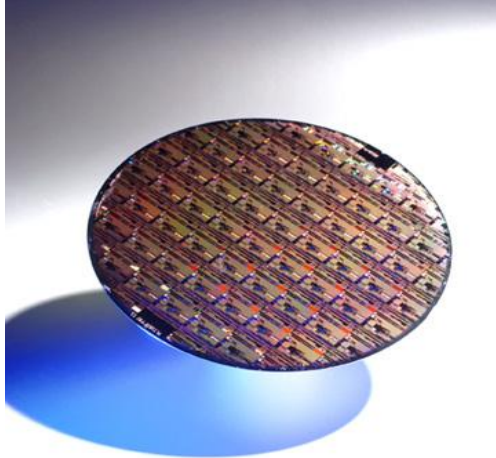


Revenue breakdown by geography

■ North America ■ China ■ Eurasia



Semiconductor Production Items



One 12” fab costs US\$3-6B, mostly for tools.

SMIC buys ~50% of its tools from the US.

- ✓ **Tools** are produced and regulated mainly by the US, Japan, and Europe, and sold globally. Many/most tools sold by US, Japan, and Europe are sold to foundries in Asia, and are subject to export restrictions in China.
- ✓ **Parts & Materials** are produced and exported globally (subject to many different restrictions).
- ✓ **Technology / IP** is produced mostly in the West and exported globally (subject to restrictions).



SMIC's Export License Authorizations

- US companies (vendors) have several licensing options (IVLs, SCLs, VEU, & License Exceptions) to export controlled items (parts, equipment, materials) to SMIC and its managed sites.
 - **Since 2001**, SMIC has benefitted from hundreds of Individual Validated Licenses (IVLs) issued by the US Government (USG) to our US vendors and to SMIC.
 - **Since 2004**, SMIC's main sites in Shanghai, Beijing, and Tianjin have been Authorized Consignees on Special Comprehensive Licenses (SCLs) issued by USG to our major US vendors.
 - **Since 2007**, the same SMIC sites have been approved sites under Validated End-User (VEU) authorization issued by USG to SMIC.

Commitments to US & Chinese Gov't's



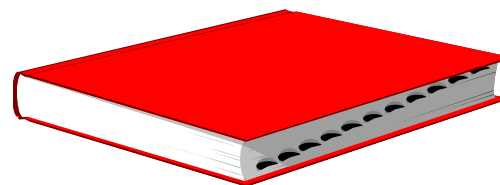
SMIC has obtained these license approvals because of its strong Internal **Compliance Program (ICP)**, which is designed to comply with export control regulations. Among other things, SMIC has committed to not making anything for:

1. **Military** end-uses or end-users;
2. **Nuclear/chemical/biological/missile** proliferation end-use;
3. A person/entity on a **Denied Parties List**; or
4. A person/entity in a United Nations **Embargoed Country** (Cuba, Iran, North Korea, Sudan, Syria, Libya).



ICP Manual – The Heart of Compliance

- Management Commitment (Policy Statement)**
- Responsible personnel (ICP Org)**
- Receipt and distribution of restricted lists and other regulatory materials
- Customer and product screening**
- Controlled items management**
- Internal Audit
- Training (all employees)**
- Record keeping
- Escalation**





Commitment to Compliance & ICP Team

SMIC commits significant resources to an effective **ICP**.

- Our **ICP** starts with our CEO's personal commitment, communicated in his policy letter that is read and endorsed by every employee.
- Our **ICP** is administered **centrally** through a **ICP Core Team** (6 full-time dedicated staff):
 - *ICP Manager, ICP Administrator, and ICP Deputy Administrator,*
 - Plus additional ICP specialists for vendor, customer, and other issues.
- Our **ICP Core Team** manages the ICP per the ICP Manual, e.g.:
 - Determines and complies with all applicable legal obligations;
 - Secures and manages resources and systems critical to the ICP;
 - Trains and supervises all ICP personnel/functions company-wide, including:
 - Dedicated *ICP Site Administrators* at all SMIC own and managed manufacturing sites;
 - Dedicated design service engineers that screen production against the Wassenaar Control List.



Customer & Product Screening

Customer Screening – “Know your customer”

- Check on customer and on product/shipping destination.
- Check lists – denied parties (MKDenial), embargoed countries.
- Are customer’s products for civilian or military use?
- What types of industries does customer work in?
- Diversion risk check list.
- Export Compliance Acknowledgement/Certification (ECA).
- Good communication early on.

Work Order Screening – “Know your products”

- Screen work orders per license parameters and conditions.**
 - At SMIC, we screen against many criteria, such as radiation hardening, cryptography, and items outside commercial temperature ranges.
- End-use application and function of the product.**
 - Does the customer’s request match the product application?
- Dialogue with the customer early in the process.**
 - This can prevent confusion, as many do not understand export controls.



Controlled Item Management

- **Good export compliance relationship with vendors.**
 - Good communication along the whole supply chain.
- **Licenses – IVL, SCL, VEU.**
 - Plan ahead to ensure SMIC business plan is aligned with export licensing/compliance; keep management aware and involved.
- **Monitoring and record keeping.**
 - Labeling of all controlled items.
 - Implementing “gates” throughout SMIC’s IT systems to control the movement and use of all items identified as controlled.
 - Requiring sign-off by ICP team prior to actions on controlled items (e.g., orders, purchases, transfers, resale, scrap, etc.).

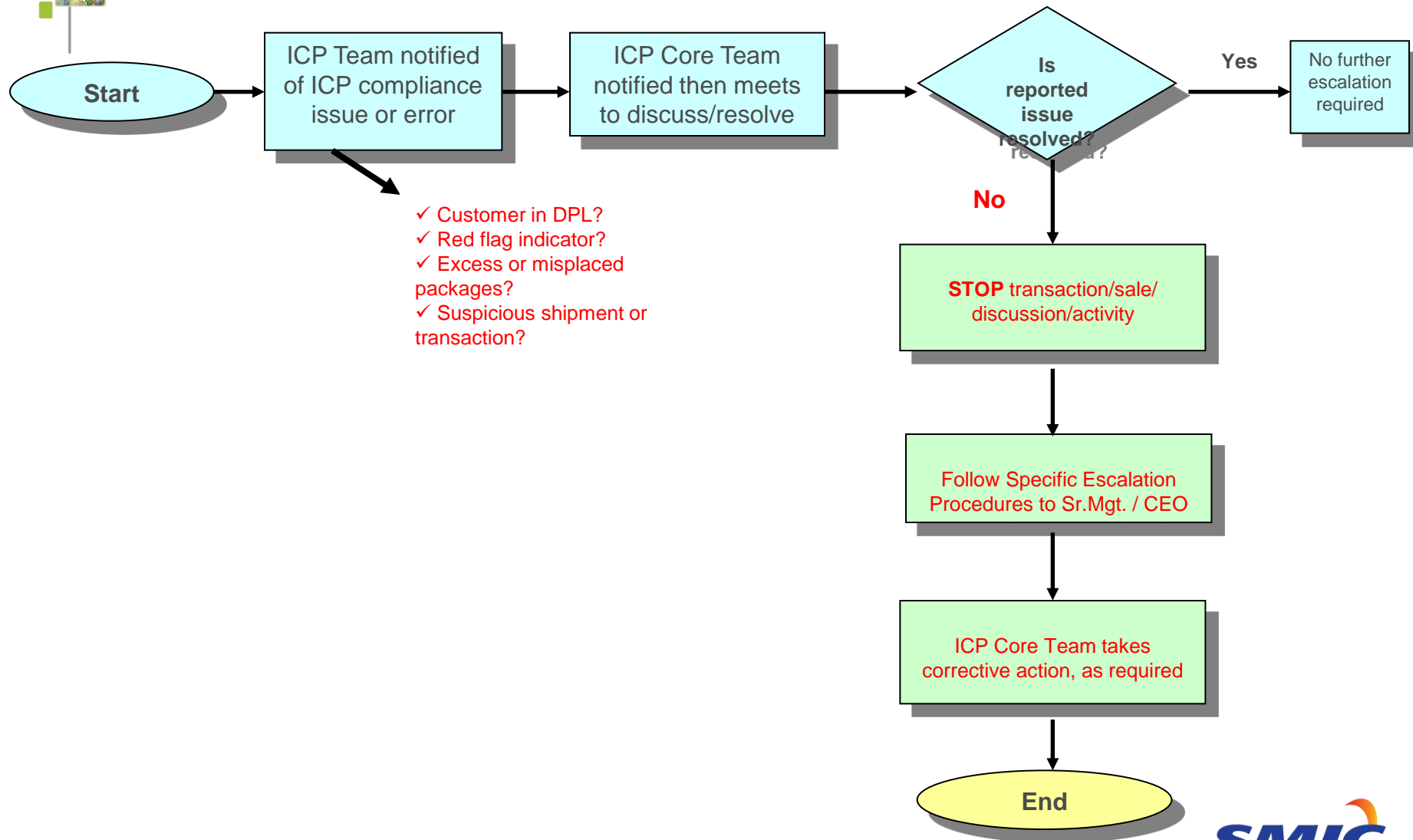


Training Requirements

- All employees receive ICP awareness training during new employee orientation, covering at least:
 - An introduction to export controls;
 - Penalties associated with export violations;
 - Purpose and description of the SMIC ICP;
 - Record keeping requirements; and
 - Key personnel.
- Employees with ICP duties receive special targeted training.



Escalation Procedures





Operational Challenges

Lack of **Regional Uniformity** in licensing policies and conditions leads to higher costs and delays because of:

1. **Increased Complexity** for US vendors and customers who do not know China-specific license requirements because such requirements generally do not exist for this region (Taiwan, Singapore, Japan, S. Korea). Ignorance of China-specific rules adds weeks/months to the business cycle, alongside standard licensing approval times.
2. **Reduced Flexibility** for entities in China purchasing US-licensed items because they include commercial production restrictions (narrowing the commercial market that can be served with that item) and/or resale/transfer restrictions (leading to higher levels of inventory, and increased cost of disposal after the useful life of the item).
3. **More Uncertainty/Delay** for companies that already must plan huge investments over long time horizons before demand is visible. Complications include when/how to obtain government approval to make commercial/civil products controlled under US law where the customer is not clearly subject to US law. **All delays are costly.** Delay of a single critical license (bottleneck item) delays the productivity of an entire production line. **Uncertainties = Lost Sales Opportunities.**



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