



THE BEST CHOICE FOR **Green Power**

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Company Introduction

- Samwin was created in 2003.
- As the exclusive domestic enterprise for MOSFET mass output.
- Focus on advanced MOSFET and power management IC.
- Headquarter at ShenZhen.
- R&D department at XiAn and Wuxi.
- R&D team from Fairchild Semiconductor.
- The total sale income is over 120 million yuan in 2007.

- Samwin is operated following **Fabless** Semiconductor Model.
- Every source of Front-end and Back-end have many years experience for other famous semiconductor company with combined advanced equipment ,high level quality control.
- Three foundries provide high quality wafer manufacture services for Samwin.
 - ☆ F1 5inch 0.8um Tech Platform: High Voltage MOSFET 200V-600V
 - ☆ F2 6inch 0.5um Tech Platform: High Voltage MOSFET 200V-800V
 - ☆ F3 6inch 0.5um Tech Platform: Low Voltage & High Power MOSFET 45V-100V 30A-110A
 - ☆ Potential F4 8inch 0.25um Tech Platform: Trench MOSFET

R&D Team

Field	Man Power	Career	Remark
Project Leader	S.H Kim	15	SAMSUNG 12 FAIRCHILD 3
MOSFET Designer	K.H Lee	12	SAMSUNG 10 FAIRCHILD 2
Process Architecture	J.H Kim	13	SAMSUNG 10 FAIRCHILD 3
	S.H Lee	10	SAMSUNG 6 FAIRCHILD 4
Unit Process	D.J Kang	13	SAMSUNG 10 FAIRCHILD 3
Test Engineer	H.K Son	14	SAMSUNG 10 FAIRCHILD 4
Application Engineer	S.H Go	5	SAMSUNG 3 FAIRCHILD 2

There are lots of R&D engineers , process engineers, FAEs supporting Samwin's advantage products.

● Mosfet Series

600V Series: 0.5A-12A

500V Series: SW830、SW840

400V Series: SW730、SW740

200V Series: SW630、SW640

700V Series: SW1N70、SW2N70

800V Series: SW1N80 SW3N80

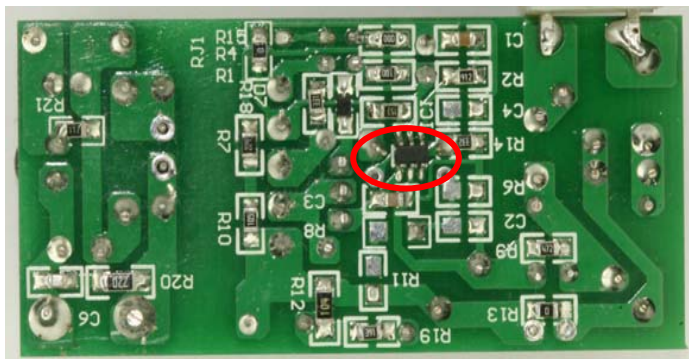
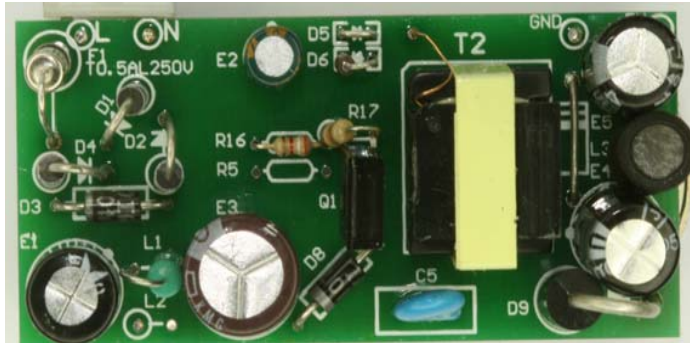
Low Voltage: SW 3205、SW50N06、SW30N06、SW80N09 etc.

● Characteristics

fast switching time, low on resistance, low gate charge and especially excellent avalanche characteristics;

● All of products meet ROHS & HF (Halogen Free) requirements

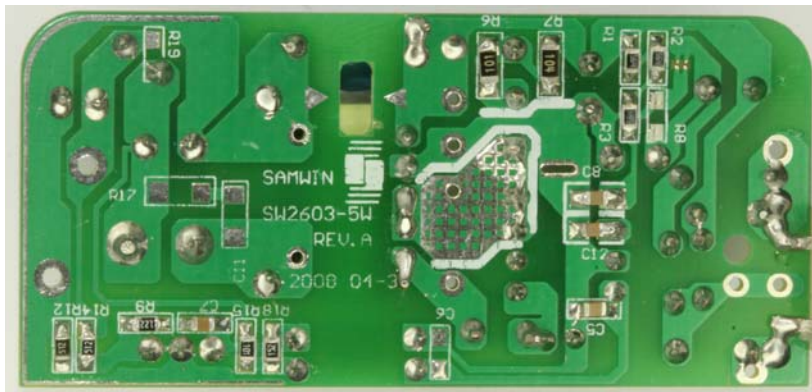
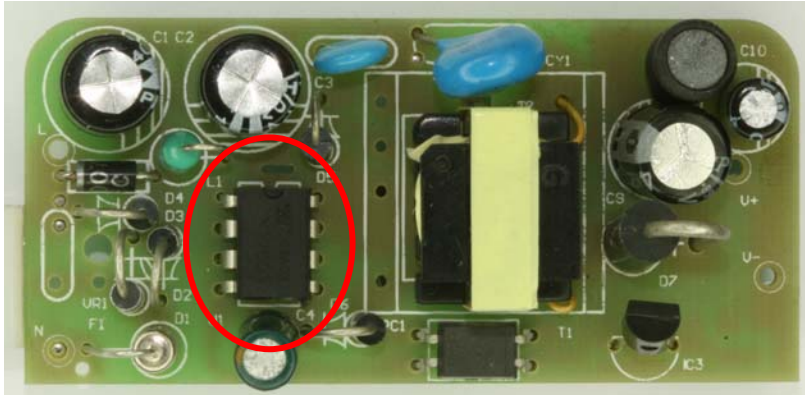




SW 101

- Primary-side feedback
- Simplifies design, no Y-cap, no 431
- $\pm 5\%$ output voltage regulation
- Dynamic base current control
- All around protection
- Complies with CEC/EPA efficiency regulations
- Competitor: OB-2211, IW1689, ACT 34
- [Detail: http://www.samwinsemi.com](http://www.samwinsemi.com)

Products Portfolio (PWM IC)





SW 2603/2604/2605

- Internal 700V BJT
- Precision Fixed Operating Frequency (134kHz)
- Advanced Burst-Mode Operation
- Internal Start-up Switch and Soft Start
- UVLO with Hysteresis (6.7V/8.7V)
- Pulse by Pulse Current Limit
- Over Load Protection
- Internal Thermal Shutdown Function (Hysteresis)
- Secondary Side Regulation
- Auto-Restart Mode
- Frequency Modulation for EMI
- Complies with CEC/EPA efficiency regulations
- Competitor: THX 202, FSD200/210
- Detail: <http://www.samwinsemi.com>

	Package	195-265V	85-265V
2603	DIP-8	7W	5W
2604	DIP-8	12W	10W
2605	SOP-8		3W

SW 8900/8800

- 85v to 265v wide range AC voltage input
- A 700v MOSFET on the same silicon chip
- Auto start up with high voltage current source
- PWM with current mode control
- 9v to 38v wide range VCC voltage
- Fixed 60KHz switching frequency
- Automatic skip cycle mode in low load condition.
- Over temperature, over current and over voltage protection
- Auxiliary under voltage lockout with hysteresis
- Competitor: VIP 22/12

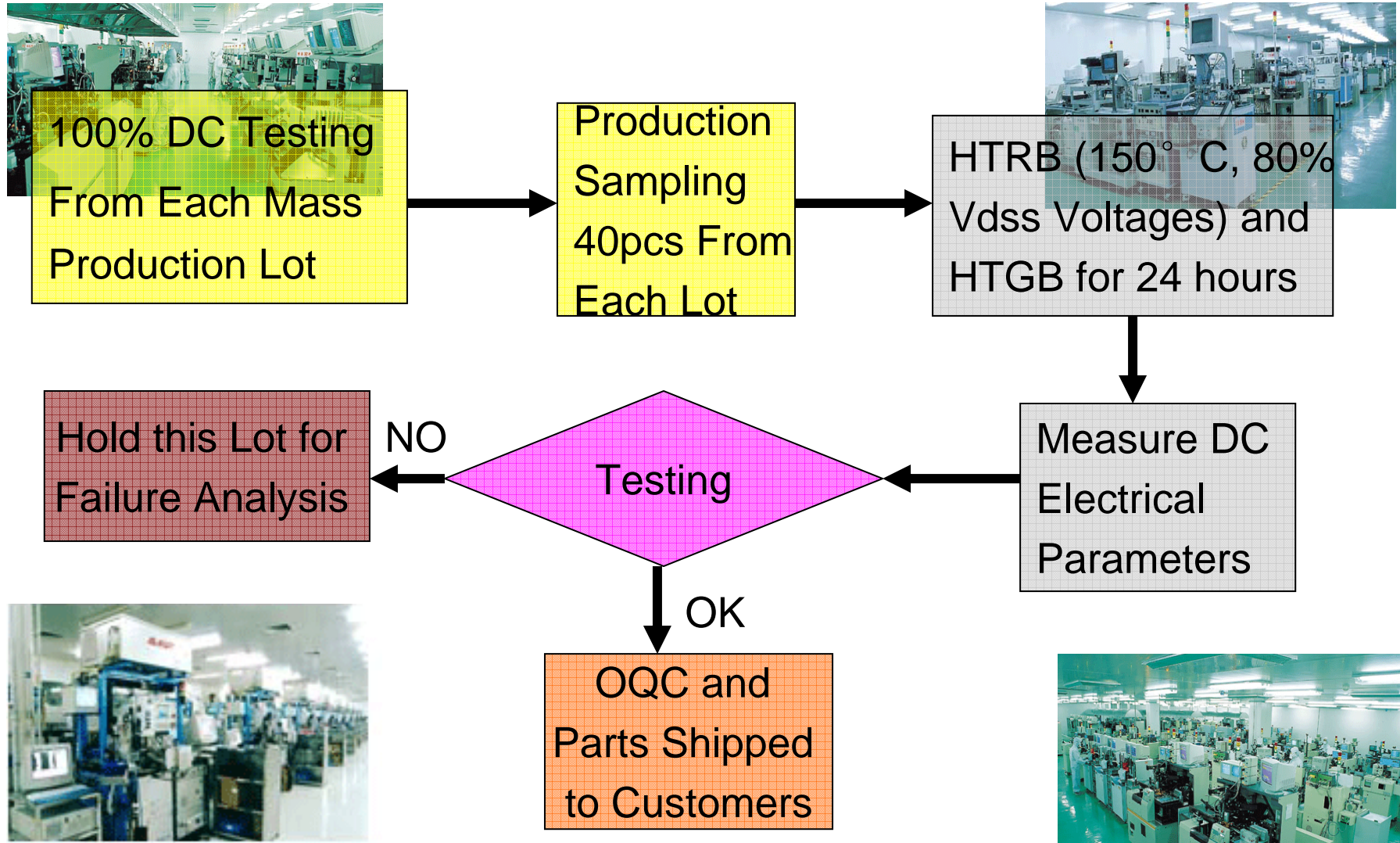
Package Type	 S08	 DIP8
European (195-265 Vac)	12 W	20 W
US (85-265 Vac)	7 W	12 W

Advanced Equipment



- The largest EPI producer
- Whole set 5" & 6" equipment
- Exact inspection & testing equipment
- Perfect FA & Reliability Lab
- Output: 30-40K pcs/month

Outgoing-Quality Control (OQC)



- Robust Testing On all Finished Devices
 - ☆ 100% DC Parametric Testing at 25°C
 - ☆ 100% UIS Test & Eas Test
 - ☆ Reliability Sampling on all Production Lots
 - ★ Most of the MOSFET suppliers sampled testing periodically, not on every part number, but on packaging types
 - ★ SAMWIN sampled testing on **Every Production Lot with 150°C and 80% Vdss Rated Voltage**

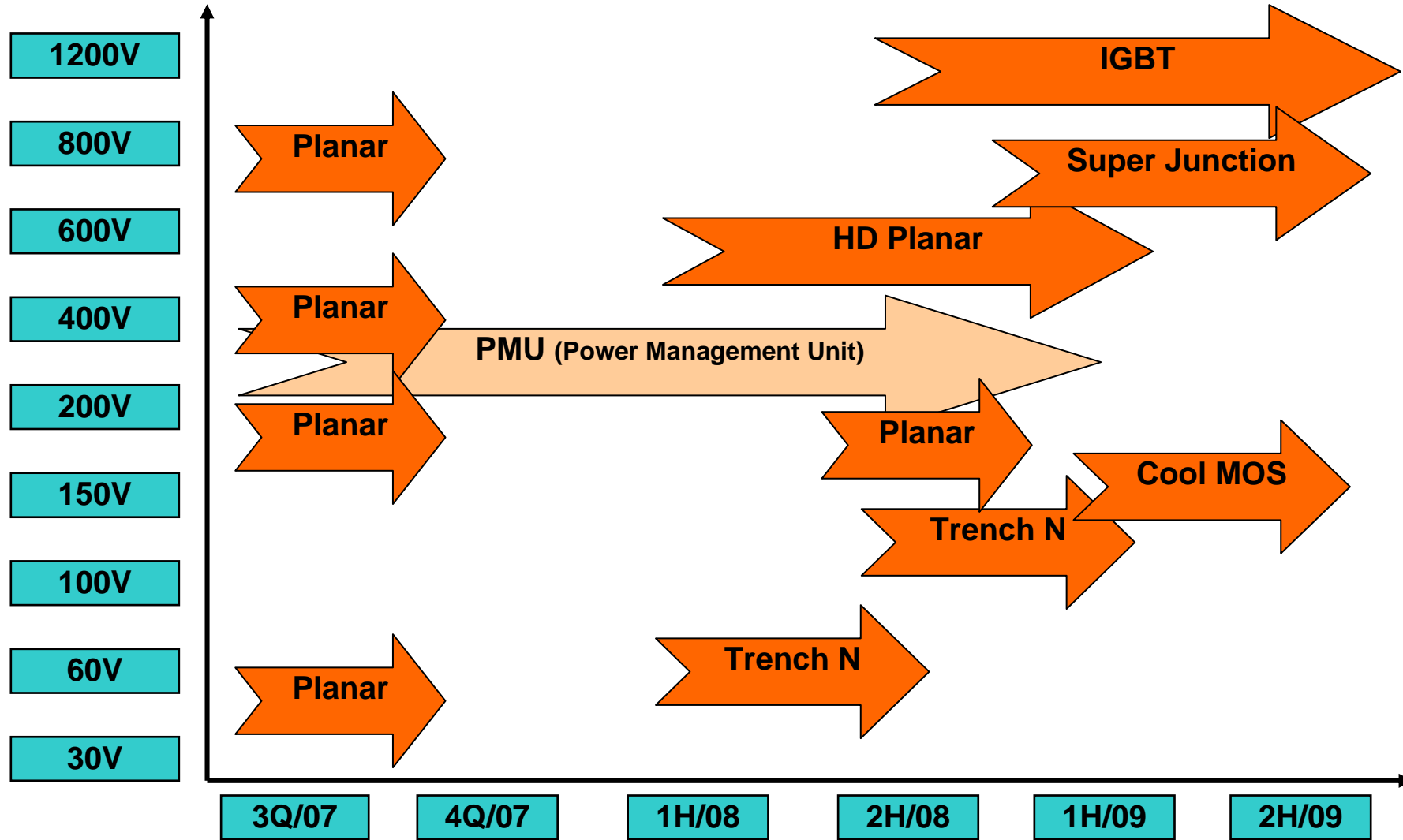
Reliability Procedures

- The reliability qualifications of new devices, wafer processes, and packages are designed to ensure that these Samwin products satisfy the internal and external customer requirements before transfer into production.
- The reliability conditions specified in JESD22, or MIL-STD-883.

High Temperature Operating Life (HTOL)
Temperature Humidity Bias (THB) or
High Accelerated Stress Test (HAST)
Temperature Cycling (TC)
High Temperature Storage Life (HTS)
Solderability
Lead Fatigue

Ball Shear
Bond Pull
Resistance to solder heat (SMD device)
High Temperature Reverse Bias Test
(HTRB)
High Temperature Gate Bias Test (HTGB)
Scanning acoustic microscope (C-SAM)

Product Roadmap

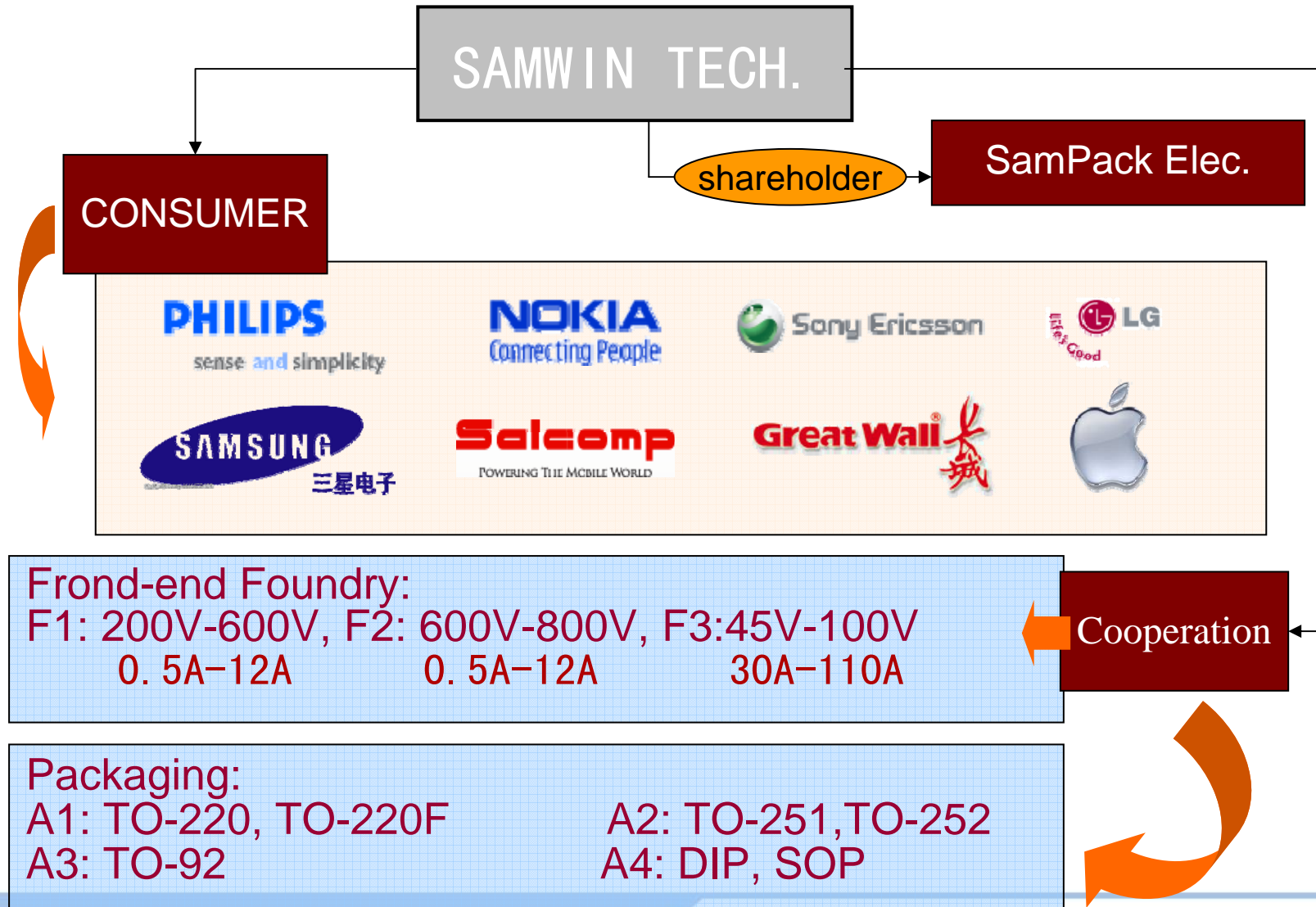


Products Application

- Electronic ballast, monitor, power switch, charger and energy save light, UPS, etc.;



Cooperation



Company Information

- **Company tenet :**
To satisfy and beyond the customer's requirements continually by excellent quality and service
- **Company spirit :**
Faithfulness, Harmonious, Innovation & Owes

Samwin South Technology Co., Ltd.

Room 2005,Cyber Times Tower A, Tianan Cyber Park, Futian, Shenzhen

Tel: 0755- 83981818 Fax: 0755-83476838

E-mail: samwin@samwinsemi.com

<http://www.samwinsemi.com>