



PDC

Date: 10th Sep, 2019

Distributor Agreement

To Whom it may concern,

We, Prosperity Dielectrics Co., Ltd. (PDC), hereby confirm JBG-Metafix (France) is authorized PDC distributor for the business of Multilayer Ceramic Capacitors, Resistors, and Inductors of PDC products in France market.

PDC France Distributor Contact Information:

Company Name: **JBG-Metafix**

Address: **ZI de la Roseraie, 80500 MONTDIDIER, France**

Tel: **+33(0) 3 22 78 78 22**

Valid Date from 10th Sep 2019 to 10th Sep 2020.

Prosperity Dielectrics Co., Ltd.

Jeff Lin

Assistant Vice President

PSA

PASSIVE SYSTEM ALLIANCE
PROSPERITY DIELECTRICS CO., LTD.



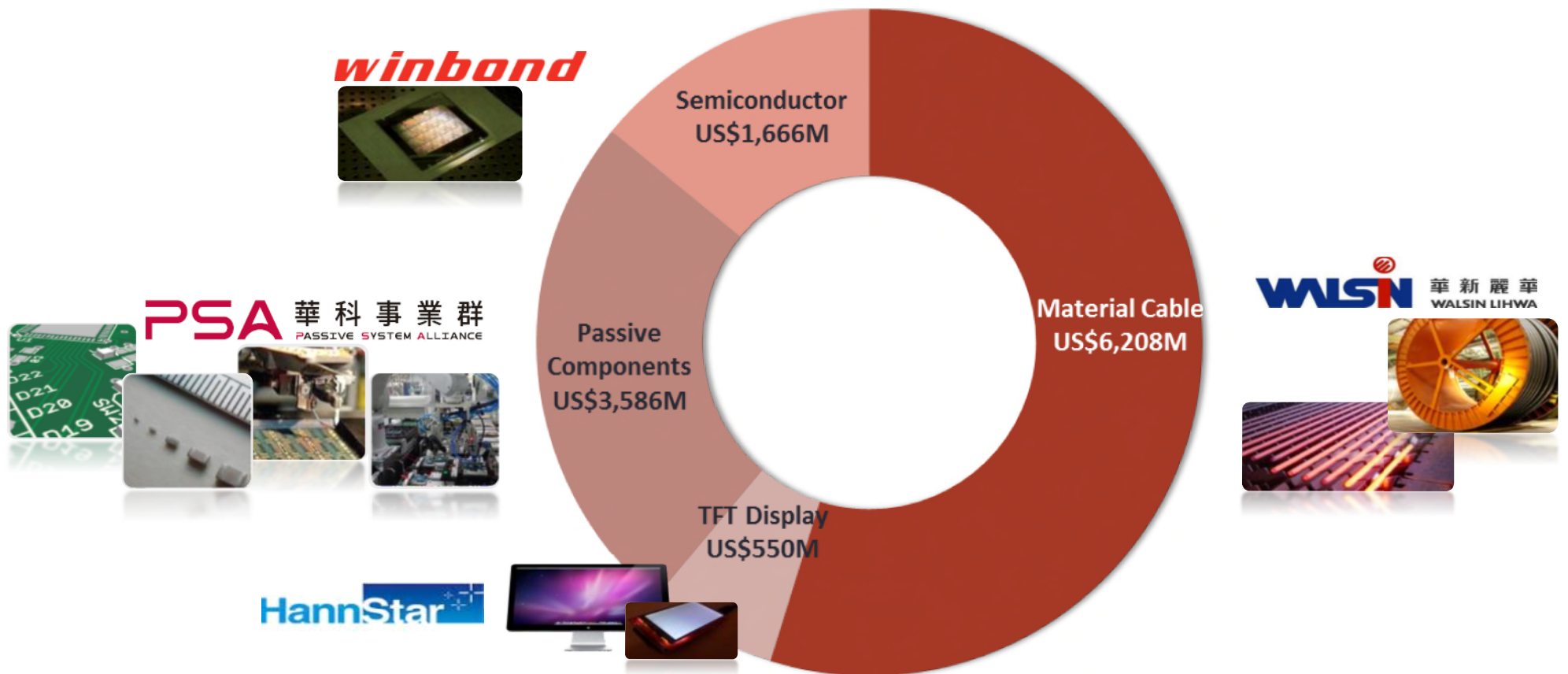
Walsin Lihwa Group & Passive System Alliance



Walsin Lihwa Group

2018 Walsin Lihwa Group Revenue US\$12,010M

-Market cap of the group was US\$8.0B, top 20 in TWSE (2018/12/31)



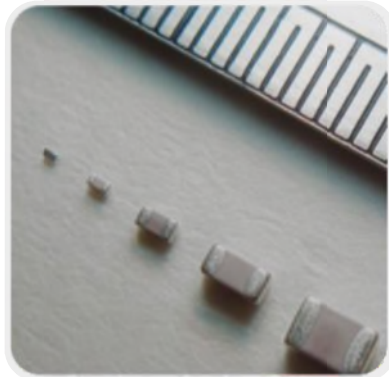


Passive System Alliance

One vision, the strength of many



Core Business of Passive System Alliance



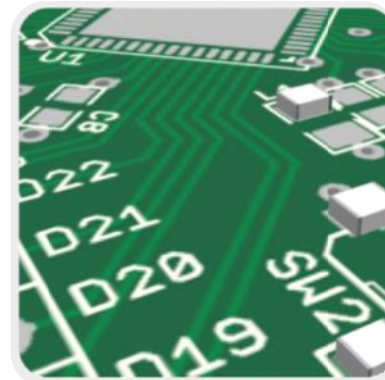
Passive
Component



IC Assembly
& Testing








PC
Board

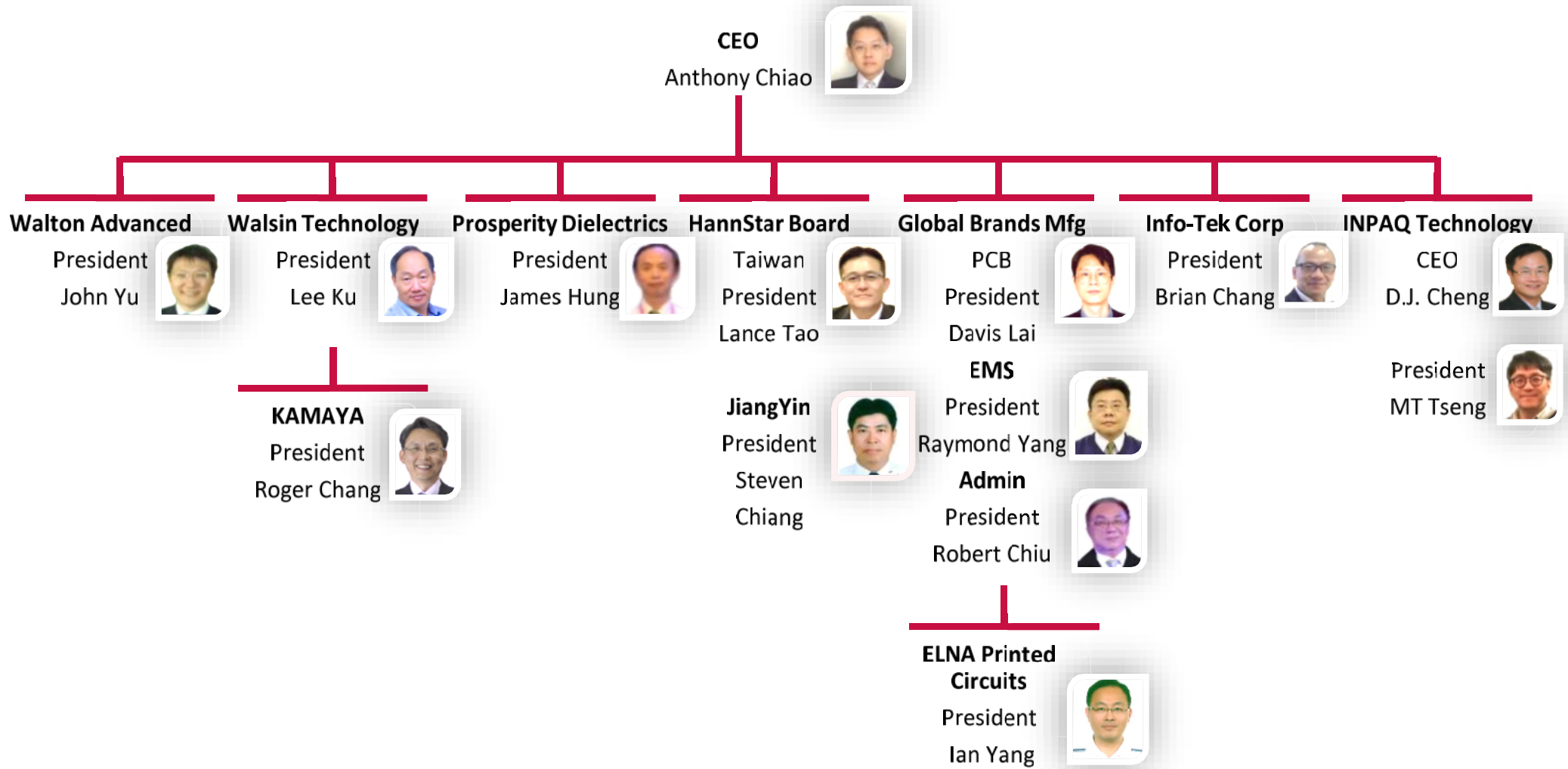


Electronic
Manufacturing
Services

PSA Member Companies & Product Offerings

	Member Company	Brand Owned	Product Offering
	Prosperity Dielectrics (6173.TW) Joined PSA in 2005		MLCC, Chip-R, ceramic dielectric powders, disc type semi-conductive capacitor elements
			Inductor, Protective Choke, Coil
	Walsin Technology (2492.TW) Joined PSA in 1992		MLCC, Chip-R, Disc Cap, Varistor, RF device & module
	Kamaya Joined PSA in 2006		Chip Fuse, specialty, SMD
	Nitsuko Electronics Joined PSA in 2001		Film Capacitor, DC/DC Converter
	Hannstar Board (5469.TW) Joined PSA in 2008		NB , Telecom, IPC, Multi-layer, HDI Board
	Info-Tek Corporation (8183.TW) Joined PSA in 2009		PCBA Assembly, SMT, Motherboard, VGA Card
	Global Brands Mfr (6191.TW) Joined PSA in 2010		PCB production , EMS
	Walton Advanced (8110.TW) Joined PSA in 1995		Turnkey IC Assembly & Testing
Hannstar Color (Shanghai) Joined PSA in 2007		Injection , design & production of refined mode	

PSA Organization Chart



PSA Group

2018 PSA Group

- Revenue US\$3,586M
- Total asset exceeded US\$5,497M
- Over 36,000 employees in 33 factories global-wise
- 7 listed companies in TWSE with market cap of US\$7,350M (2018/07/31)

Passive Component BG

- Guangzhou, Dalang, Suzhou
- Malaysia, Japan
- Wujiang, Yongzhou, Wuxi
- Taoyuan, Yangmei, Kaohsiung, Zhunan, Taichung

IC Packaging & Testing

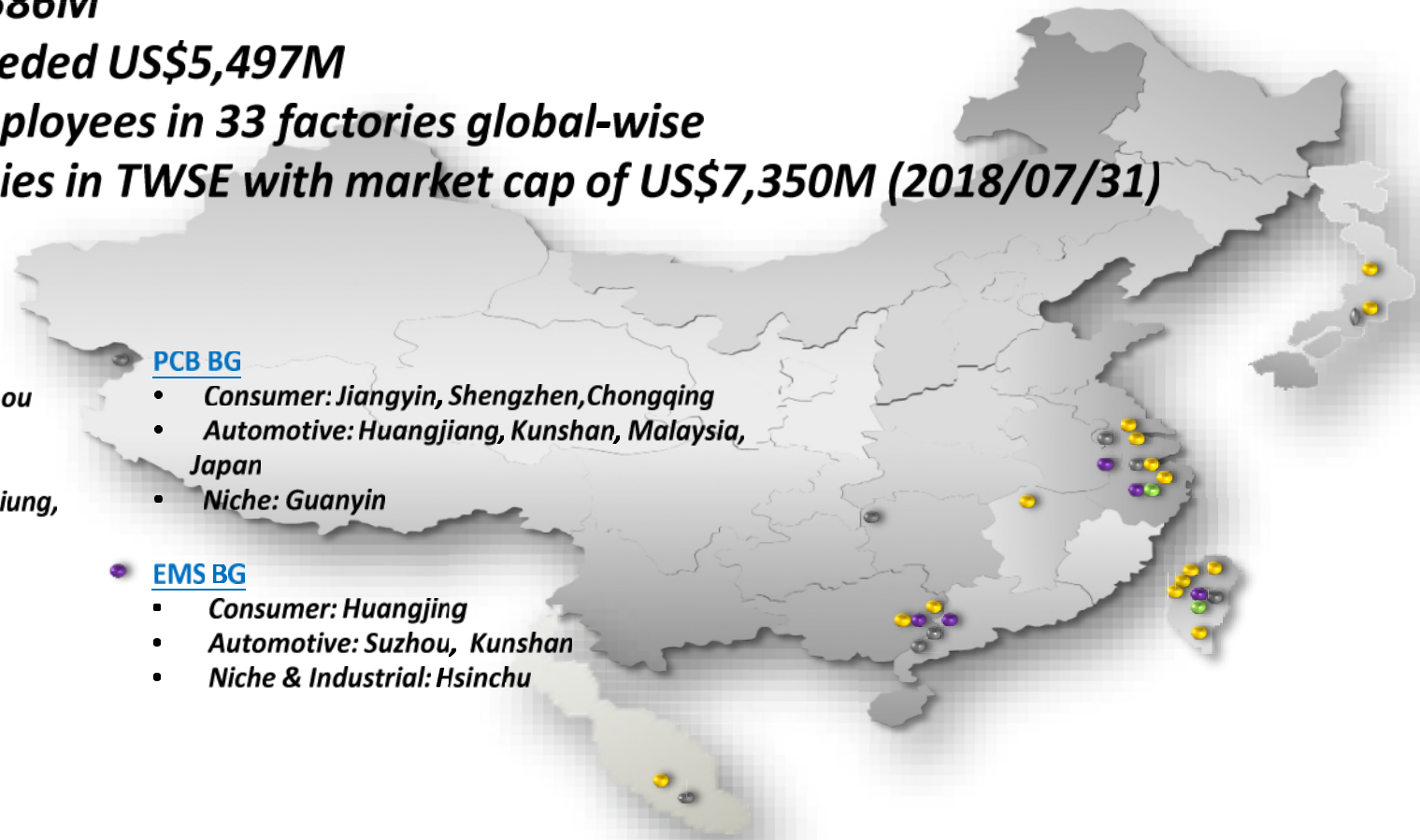
- Suzhou
- Kaohsiung

PCB BG

- Consumer: Jiangyin, Shengzhen, Chongqing
- Automotive: Huangjiang, Kunshan, Malaysia, Japan
- Niche: Guanyin

EMS BG

- Consumer: Huangjing
- Automotive: Suzhou, Kunshan
- Niche & Industrial: Hsinchu





Prosperity Dielectrics Corporation



Prosperity Dielectrics Company Brief

Information:

- Established date: June, 1990 in Taiwan
- Capital: 1.851 Billion NTD (approx. 57 MUSD)
- Employees: 1,116
- Brand : PDC, Frontier

Unit in K USD	2012	2013	2014	2015	2016	2017	2018
Exchange rate applied	29.6	29.7	30.3	31.7	32.3	30.4	30.7
PDC Sales	73,865	71,784	82,959	75,322	83,097	104,036	187,300

Location Sites:

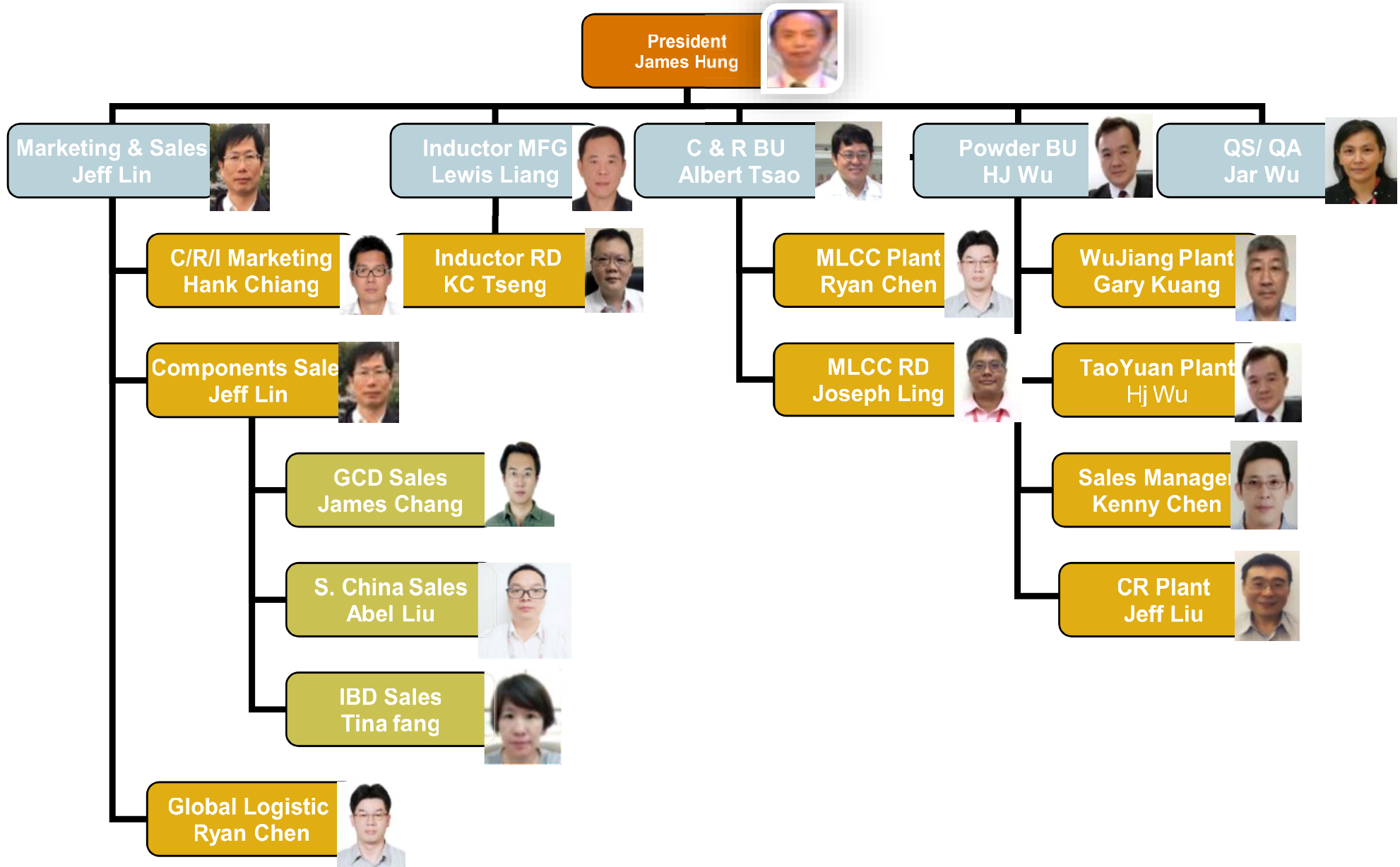
- Taiwan -- Taoyuan / Yangmei Plant / Yangmei Sales Office
- China -- Wujiang / Yongzhou Plant / Dongguan Sales Office

Manufacturing experience:

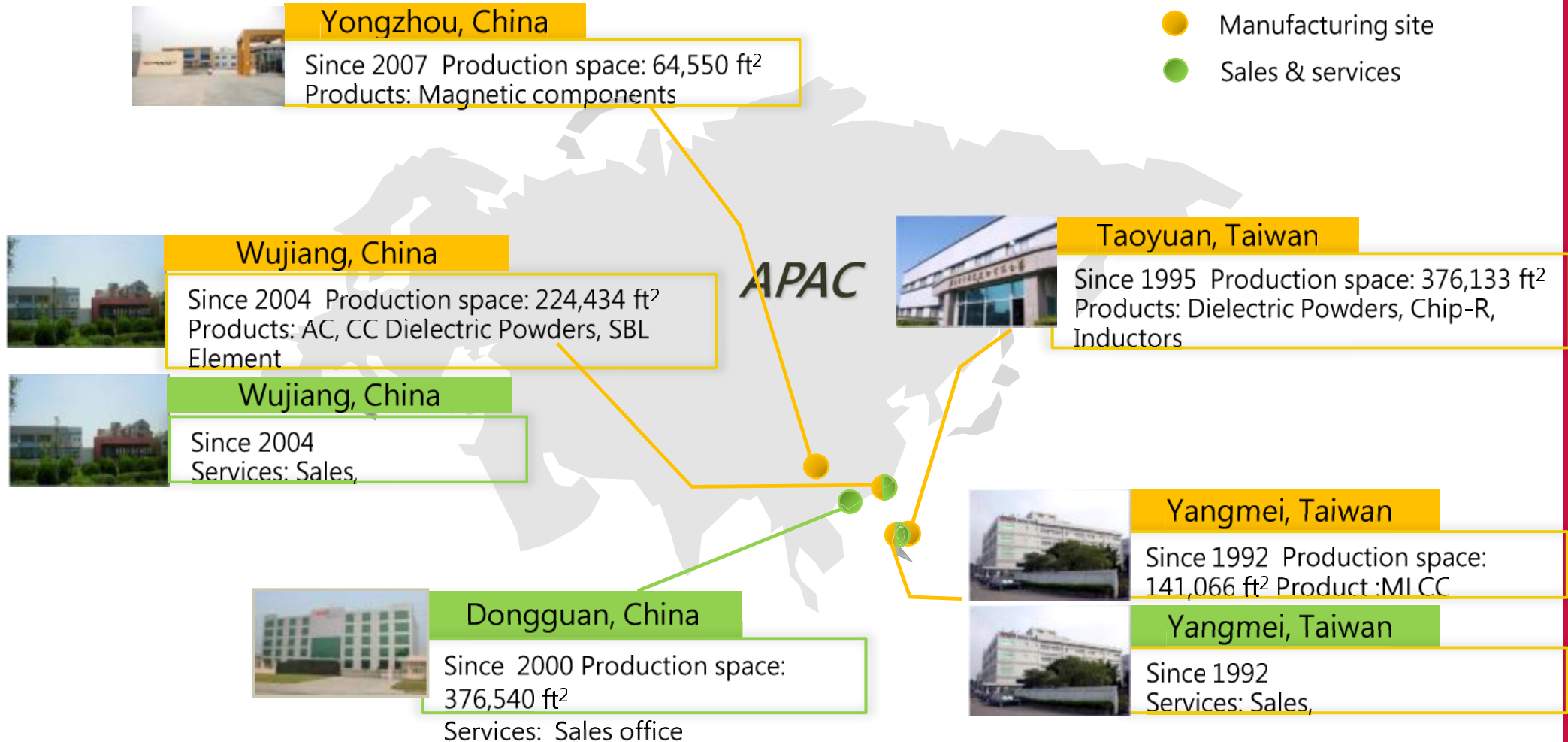
- Coil – Since 1972 (47 years)
- MLCC/CR – Since 1990 (29 years)
- Dielectric Powder – Since 1995 (24 years)



PDC Organization Chart

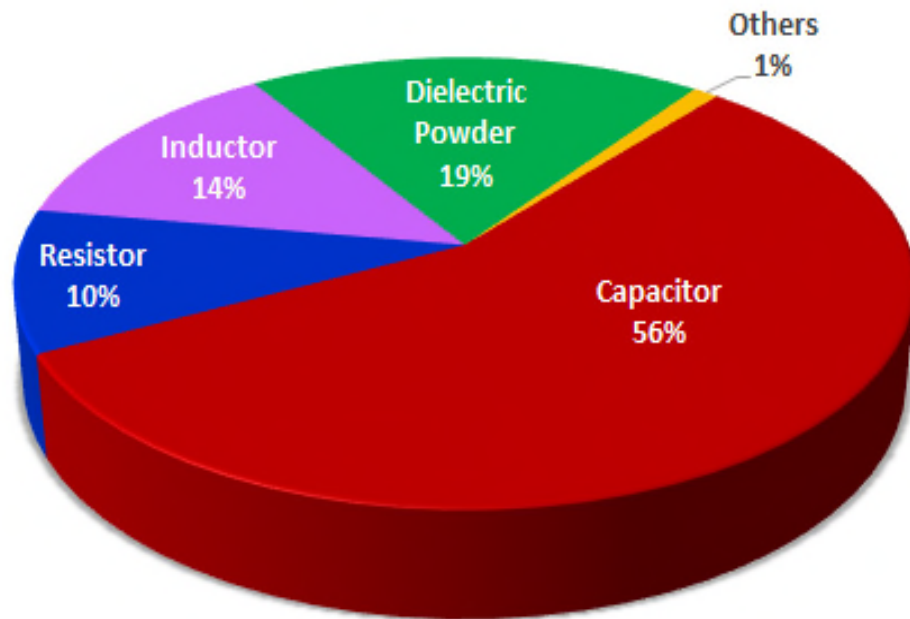


Manufacturing facilities

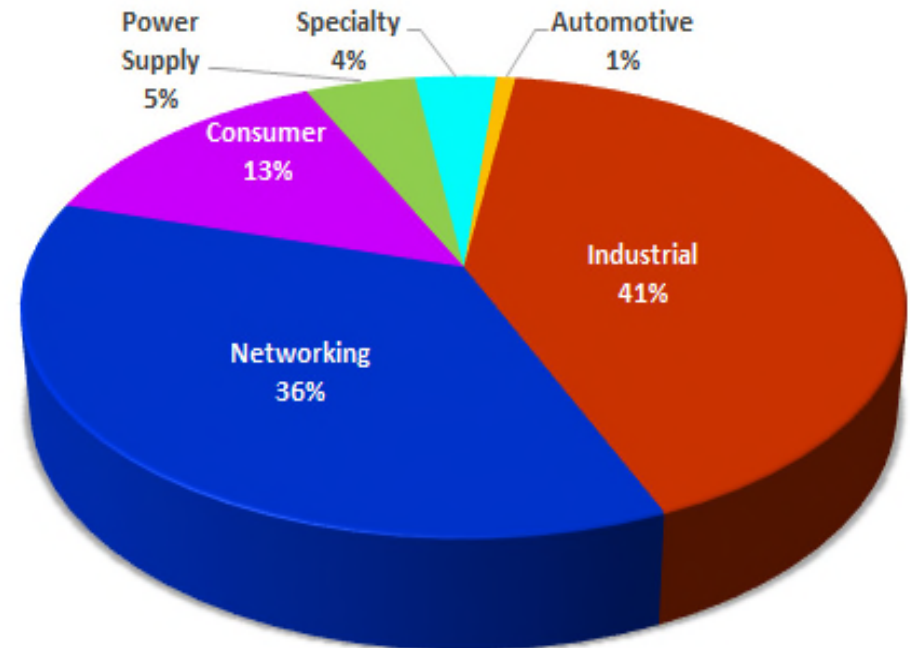


PDC Sales Breakdown by Product & Channel

2018 Revenues Breakdown by Product



2018 Revenues Breakdown by Segment



PDC Specific Advantages

- ▶ The only supplier in Taiwan capable of consolidating vertical resources along the value chain, from top to dielectric powder, and down to finish product capacitor
- ▶ Possessing both manufacturing experiences and one-stop shop product range, PDC is one of the few trusted vendors in Taiwan with a history of 20 years or more in producing specialty capacitor, resistor, and inductor.
- ▶ The only supplier in Taiwan positioned to manufacture AS9100 aviation industry certified, industrial-grade, and automotive IECQ certified specialty products with high reliabilities.
- ▶ One of the few vendors in Taiwan capable of designing analytical tools such as HFSS, ADS, and JMP, software that simulates performance of RF MLCC and inductors

Milestones and major achievement

Brand Value

- ▶ The first supplier in Asia to get SEMKO product safety certificate in 2001.
- ▶ ISO 9001 certificated in 2003.
- ▶ TS16949、ISO 14000 and OHSAS 18000 certificated in 2004.
- ▶ Industrial Sustainable Excellence Award in 2004.
- ▶ IECQ in 2008.
- ▶ Fast 500 Taiwan Award by Deloitte Technology in 2008.
- ▶ Ranked No. 677 in the Top 1000 Manufacturers in Taiwan contest held by Common Wealth Magazine in 2009
- ▶ Silver Invention Award for Copper or Its Alloy Cofirable Dielectric Ceramics in 2012.
- ▶ FVS series of SMD High Voltage Chip Resistor passed UL Safety certification in 2013.
- ▶ Aerospace Quality Management Systems AS 9100 certificated in 2015
- ▶ The first 3rd party certification in the world for MLCC AEC Q200 by IECQ AQP in 2016
- ▶ PDC was selected fastest growing Top 100 companies in 2019 by commonwealth magazine



Market Performance

- ▶ PDC ceramic dielectric powder ranks No. 2 in global capacity and No. 3 in worldwide market share.
- ▶ The only local manufacturer in Taiwan capable of delivering specialty products including multiple-layer ceramic capacitors, chip resistors, and coils.
- ▶ The only local manufacturer in Taiwan adopted by the supply chain of Japanese manufacturers.

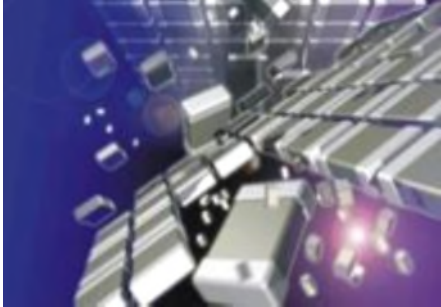


Product Information



Components

▶ **MLCC**



- Safety Certified X1/Y2, X2
- High Voltage: 100V – 10KV
- Big Size: 3035–13060
- Custom Made Available

▶ **Chip-R**



- Current Sensing : down to 1m Ω
- Triple Power: up to 3W
- Automotive Grade
- Safety Certified Chip Resistor

▶ **Inductor**



High Current SMD Power Chokes

SMD Power Inductors

Inverter Transformer

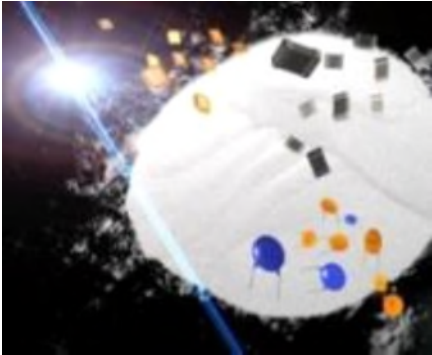
SMD Air Coils, Chip Coils and Molded Wire Wound Inductors

SMD Wire-wound Chip Inductors and Common Mode Chokes

Various Lead Type Inductors and Transformers

Raw material

▶ Dielectrics Powder



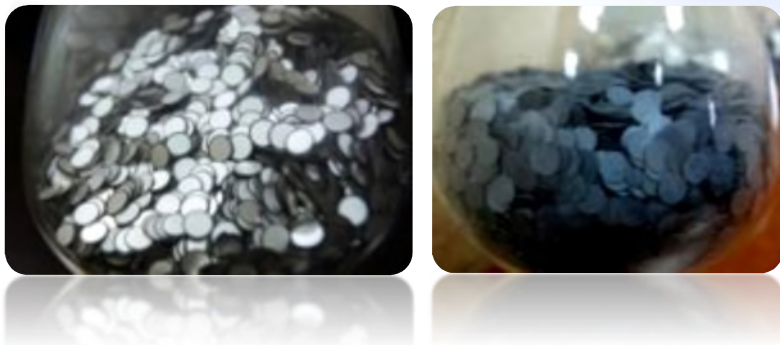
- BT Series
- Disc Series
- MLCC Series
- Microwave Series

▶ Semiconductive ceramic capacitor element



- Type: Y5V/Y5U/Y5P
- W.V.: 16V/25V/50V
- Cap.: 103-224
- Size: 3.0-11.0mm

Dielectric Powder



Market Performance

In addition to dielectrics powder, PDC offers specialty components such as Disc capacitor, MLCC capacitor, patch antenna, resonator, and filters.

Production capacity of PDC for ceramic dielectric powder ranks No. 2 in the world, occupying the third position in the total consumption value of the world.

Specialty

- 1) Excellent Electrical Properties
- 2) Full range of lead-free and RoHS-compliant products
- 3) Microwave dielectric powder with various dielectric constants
- 4) Specializes in solid state BT, and offers powder that are competitively priced and effectively formulated
- 5) Uniform particle size distribution and consistent quality from lot to lot

MLCC



Specification

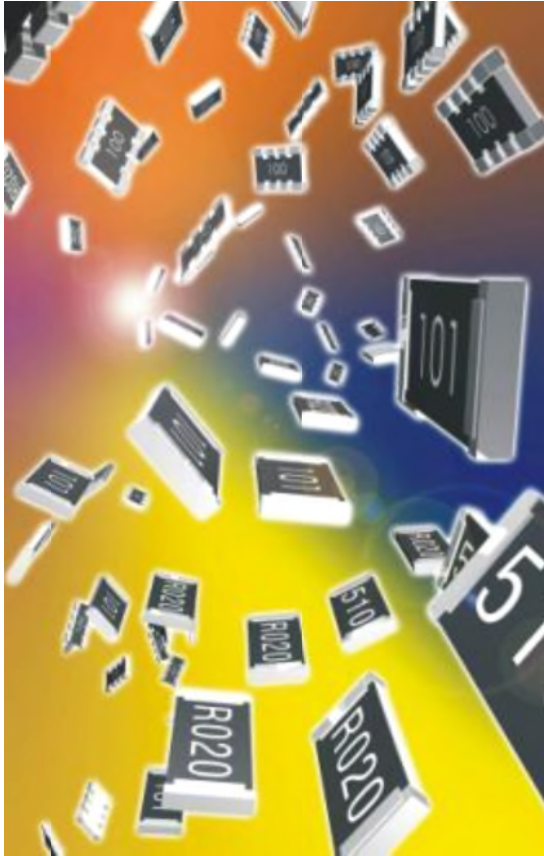
- 1) High Voltage : 100V ~10KV
- 2) Mega cap : 1206~2225 Stack chip: 1~4pcs
- 3) Mid-Voltage and High Cap : 50V to 250V 1uF up
- 4) High Precision : tolerance of $\pm 2\%$ / $\pm 1\%$
- 5) Safety recognized : X1/Y2 , X2 , 1808 to 2211
- 6) Big size : 3035 / 4252 / 5550 / 5780 / 6560/ 7680/ 8850/ 13060
- 7) Anti-Bending : (Soft termination) : 0603 to 2225
- 8) Special application : X7T (excellent DC bias)

Arc Prevention

Application

- 1) Communication (Modem, Cable Modem, LAN, HUB, Router, ADSL, VDSL, Cell Phone, WLAN, Splitter)
- 2) Consumer Electronics (Digital Camera, Game consoles)
- 3) Industrial Electronics (Connector, Instrument)
- 4) Power (DC-AC Inverter, SPS, Adapter, Charger, DC-DC Converter, Battery Pack for N/B & Cell Phone, Ballast)

Chip Resistor











Specification

- 1) Automotive Chip Resistors
- 2) Safety Certified Chip Resistor : 0603 to 2512
- 3) Metal paste CSR : 0.010 ohm to 0.910 ohm
- 4) Metal paste High Power CSR : 0.010 ohm to 0.910 ohm
- 5) Metal Strip CSR : 1m ohm to 220m ohm
- 6) Anti-Surge Resistor :1 ohm to 1M ohm
- 7) High Power : 2512 (2W), 2010 (1W) , 1206 (0.5W)
- 8) Triple Power : 2512 (3W), 1206 (2/3W) , 0805(0.5W)
- 9) High Voltage : 2512 (3000V) , 2010 (2000V) ,1206 (800V)

Application

- 1) Automotive
- 2) Computer (N/B, M/B, IPC, PDA)
- 3) Communication (Cable Modem, LAN, HUB, Router, ADSL, VDSL, Cell Phone, WLAN)
- 4) Industrial Electronics (Instrument)
- 5) Power (DC-AC Inverter, SPS, Adapter, Charger, DC-DC Converter, Battery Pack for N/B & Cell Phone, Ballast)

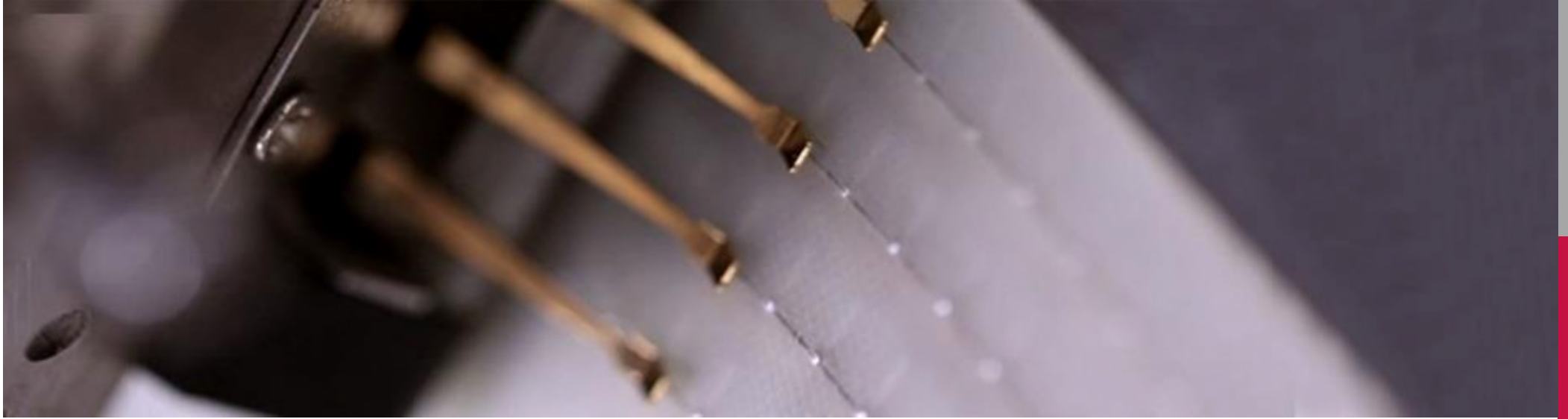
Inductor

Application	Product	Series Reference	Photos
Signal	Wire-Wound RF Inductor	0402CP , FEC0603CP , FEC0805CP , FEC1008CP, 1812CP (Standard type) 0603HQ & 0805HQ (Hi-Current type)	
	Common Mode Choke	SCM2012F, SCM7038F	
	Air Wound Coil	29XX, LSQ	
	Balun	BIH2012OB, BIY Series	
Power	Molding Power Choke	MCS Series	
	Power Choke	CSM, CSN, CSS	
	Line Filter	16xx , 3xx	
	Transformers	SRV, SEV, SEH	

Certifications



Certification	Year of Approval
ISO 9002	1994
ISO 9001	2001
IATF 16949 (TS 16949)	2007
ISO 14001 OHSAS 18001	2007
QC 08000	2008
AS 9100	2015



Customer References

Global Key Accounts by Application Segment

Industrial & Power Supply



Automotive



Communication / Broadband



Consumer & PC





Corporate Social Responsibilities

a Socially Responsible Enterprise

PDC proactively participates in charity activities to help the needed and guide the youth.

Mrs. Chiao, Chairman of the PSA charity association, visited the hearing-impaired children.



PDC contributes to the sociality by sponsoring and adopting farmland cultivation. >>



<< With PDC's help, special horse-riding treatment were offered to sick children as a physical therapy



Hosted workshops for teenagers to experience how real-world work day is like. >>



a Socially Responsible Enterprise



<< Our volunteers spent a wonderful day at a senior center helping them with bloodpressure measuring, hair-cutting, etc.



^ Our volunteers transported food and water to the affected areas after the Chinghai earthquake



<< Our volunteers distributed necessity and school supplies to local kids



<< We awarded less fortunate students who performed well in schools with scholarships to ease the burden



<< PDC sponsored less fortunate children from elementary schools in Qinghai China





Thanks for your time