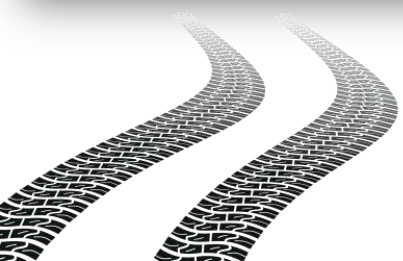


A large, abstract background image with a blue color palette. It features a central circular opening on the left, from which light rays emanate, creating a tunnel-like effect. The background is composed of various shades of blue and dark blue, with geometric shapes and lines that suggest a sense of depth and movement.

Automotive Discrete Semiconductors



World-Class Manufacturing

In-House Wafer Design & Foundry

120K Wafers/Month

All Diodes & Rectifiers

(Including TVS, Bridge)

1 Billion Pieces/Month

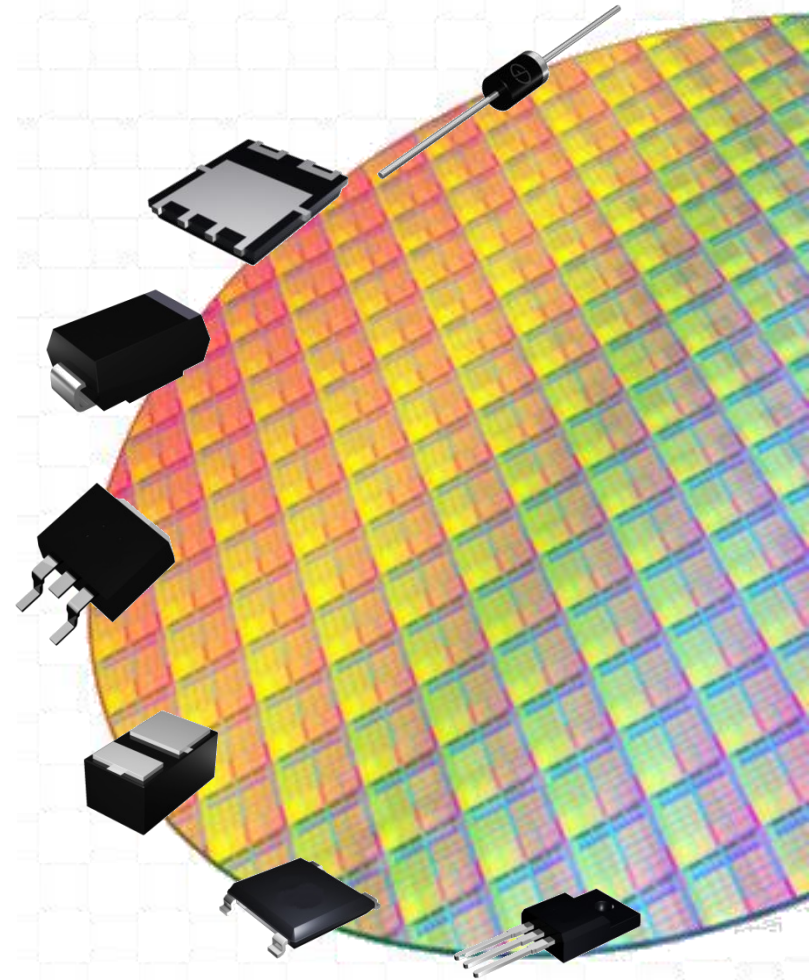
Power Rectifiers

(TO-220, D2PAK, DPAK, etc.)

50 KK/ Month

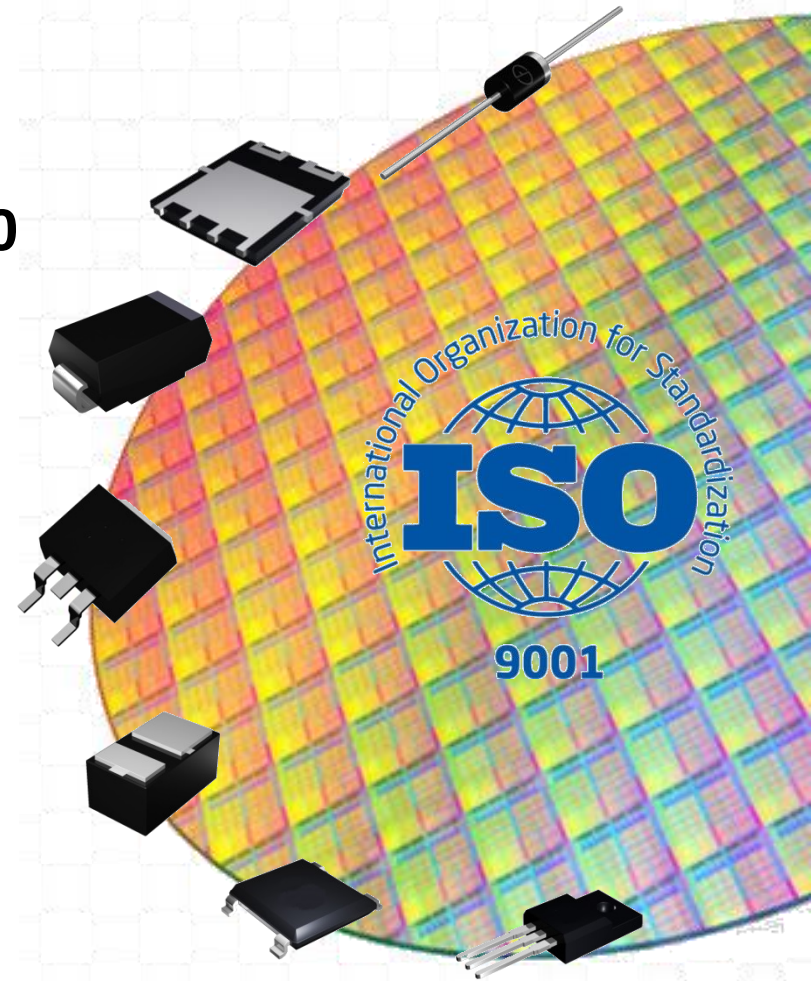
DFN/QFN Package

300 KK/Month

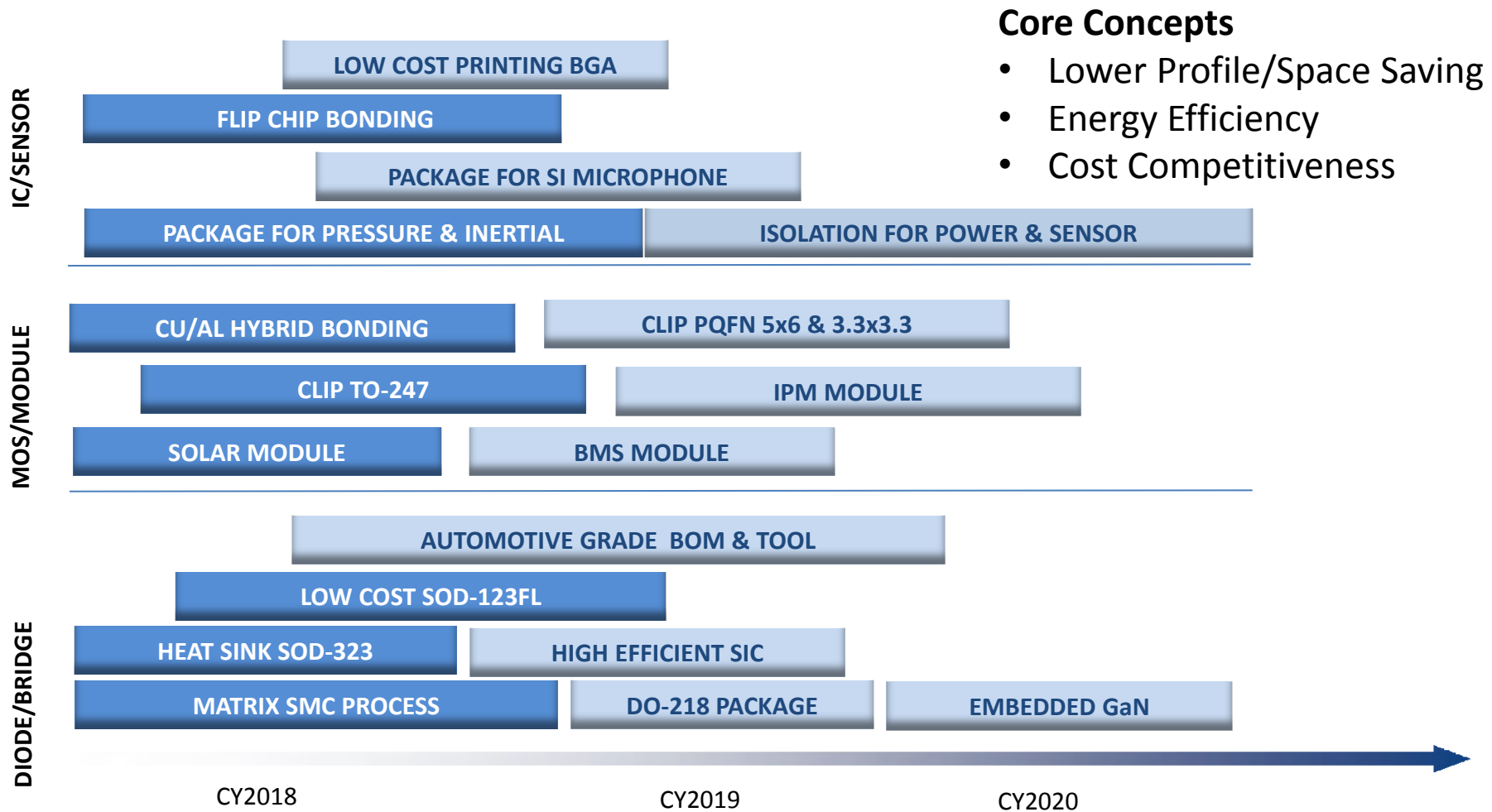


Quality Certified

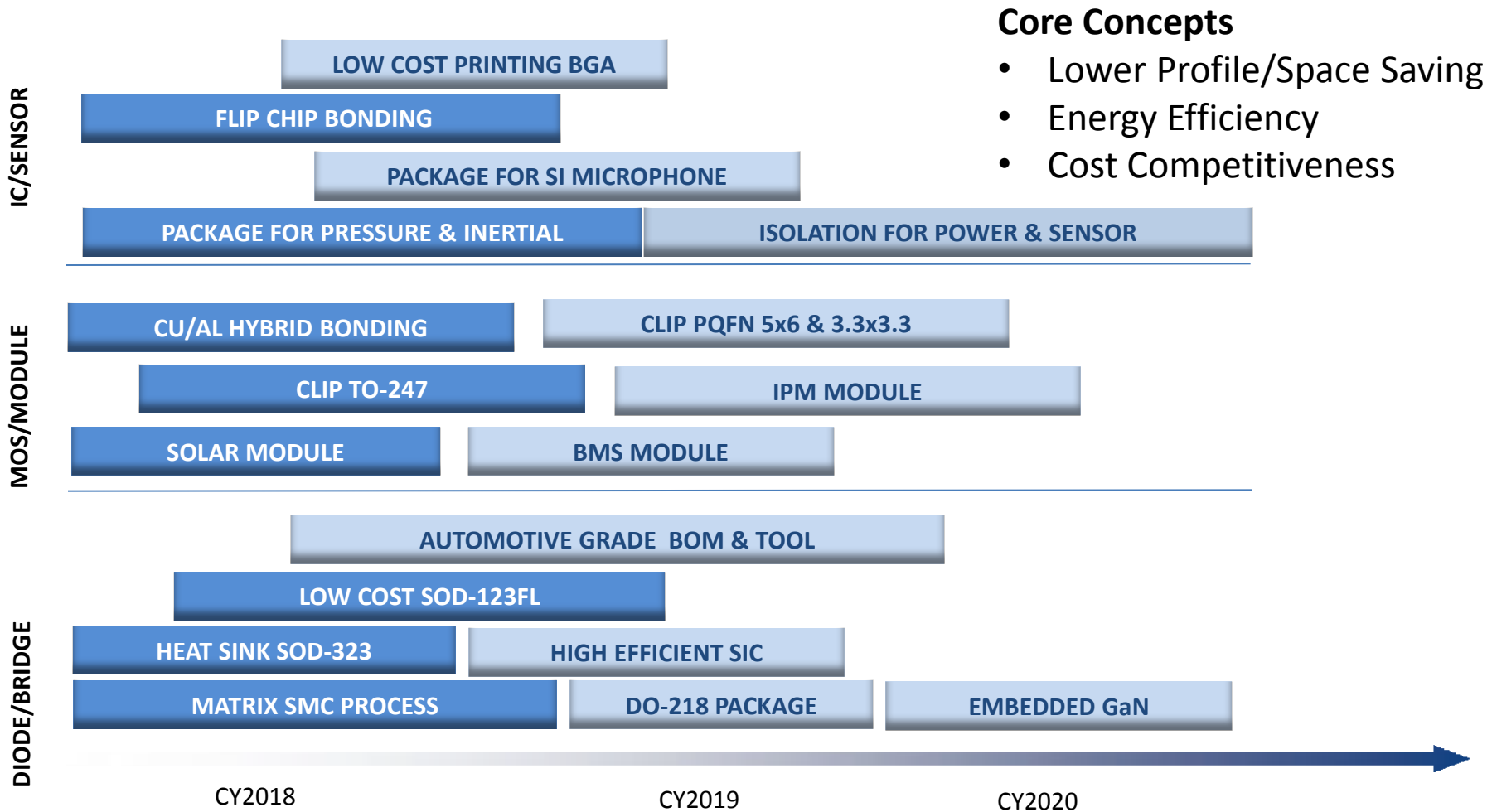
- **Quality: ISO9001**
- **Automotive: 16949**
- **Environment: ISO14001 & QC080000**
- **Health & Safety: OHSAS18001**
- **Information Security: ISO/IEC27001**
- **RoHS Compliance & Halogen Free**
- **AECQ Compliant**



3-Year Technology Roadmap



3-Year Technology Roadmap



Applications

AIR BAG

Di:F7A,GN1M,GN3D
TVS:SMCJXX (1.5W) ,

Meter

Di : GN1M,GN3D,
TVS : SMCJXX (1.5W)

HID

SKY:SK2BA. SK3B
LLD:FU5. ES2DA

TPMS

Di : F7A,GN1J

HEV-INVERTER

Di : GN1G.
SKY : SMBRP1545
LLD : ES1D,ES3D

EPS

Di:F7A ,GN1J,
Z-Di:ST70-27F (5W)

ATA

Di:F7A.GN1G
SD:1N4148W
TVS:SMAJ40A (400W)

Car Distance Sensor

Di:F7A.GN3M
LLD:ES2D.ES2DA
TVS:SMBJ** (600W)

ECU

Di:F7A
LLD:ES3D.ES2DA
Z-Di:ZMM**(1W)

HEV-DC/DC CONVERTER

SBD : DF30NC15
LLD : D1FK60,D1FL20U,DE5LC20U

Audio, Navigation

Di:GN1M,F7A,GN3J,
SKY:SK14,FS14, FS24,
LLD:ES2DA,ES3D
Z-Di:BZV55** (0.5W) ,
TVS:SMBJ**(600W)

Air Conditioning

Di:GN1M,GN3M
SKY : SK54
Z-Di : ZMM** (1W)
TVS:SMBJ36CA

BCM

Di:F7A,FU5,GN3M,
SKY:SK14,FS24
TVS:SMBJ40A (600W)

CVT - ATCU

Di:GN1M.GL1M
SBD : FS24.SK36A

Production Line Comparisons

Section	Item		Automotive Product	Consumer Product
Product	Direct Material	Compound	High-performance compound	Normal performance compound
		Solder Paste	High-performance solder paste	Normal performance solder paste
	Product naming rule		M+Part No.	Part No.
	Marking content		Logo+M+Part No.	Logo+Part No.
	Plating thickness		7um-20um	4um-12um
	Packing specification		Automotive specification	Consumer specification
	Label specification		Automotive label	Consumer label
	Reliability requirement		compliance with AECQ-101	compliance with consumer diode spec

Production Line Comparisons

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Production Line Comparisons

Process	Method	Travel sheet		Automotive dedicate travel sheet	Consumer product travel sheet
				Carrier	Buffer
		IPQC		Sampling plan tighten than consumer product	Consumer product control sampling plan
		OQC		C=0, AQL	C=0, AQL
				Major defects AQL=0.025; Minor defects AQL=0.25;	Major defects AQL=0.065; Minor defects AQL=0.4;
	Visual inspection	After die&clip attach		Sampling plan tighten than consumer product	Consumer product control sampling plan
		Finished Good			
	MES		System poka-yoke, traceability control	less traceability and poka-yoke control	
	Process flow	IR Reflow		Once reflow after dam-bar cutting	No
		Baking		Baking after plating(150C 1H)	No
		PMC		175'C 8H	175'C 4H
		Plating		High-speed plating	Bare plating
	SPC	Clip shear strength		Xbar-R	No
		Plating thickness		Xbar-R	Xbar-R
		Lead tip to tip		Xbar-R	Xbar-R
		Lead stand-off		Xbar-R	Xbar-R
	MSA	Tester calibration		Once/half year	Once/year
		Tester G R&R		Once/half year	Once/year
	TMTT	PAT		Yes	No
		SBL		Yes	No
		Test program&data server		Yes	No
		E-Mark		Yes	No
Document	FCCP\FMEA\OCAP\SOP\PM\Checklist			Dedicate document follow automotive criteria	Document for consumer product

A large, abstract blue background with a central circular light effect and geometric patterns of overlapping lines and shapes.

Questions?
Thank You

