Comchip

SMD Diodes Specialist

Company Profile 2024

YingGe Taiwan
Headquarters / Manufacturing

Fremont, CA - Sales/Warehouse

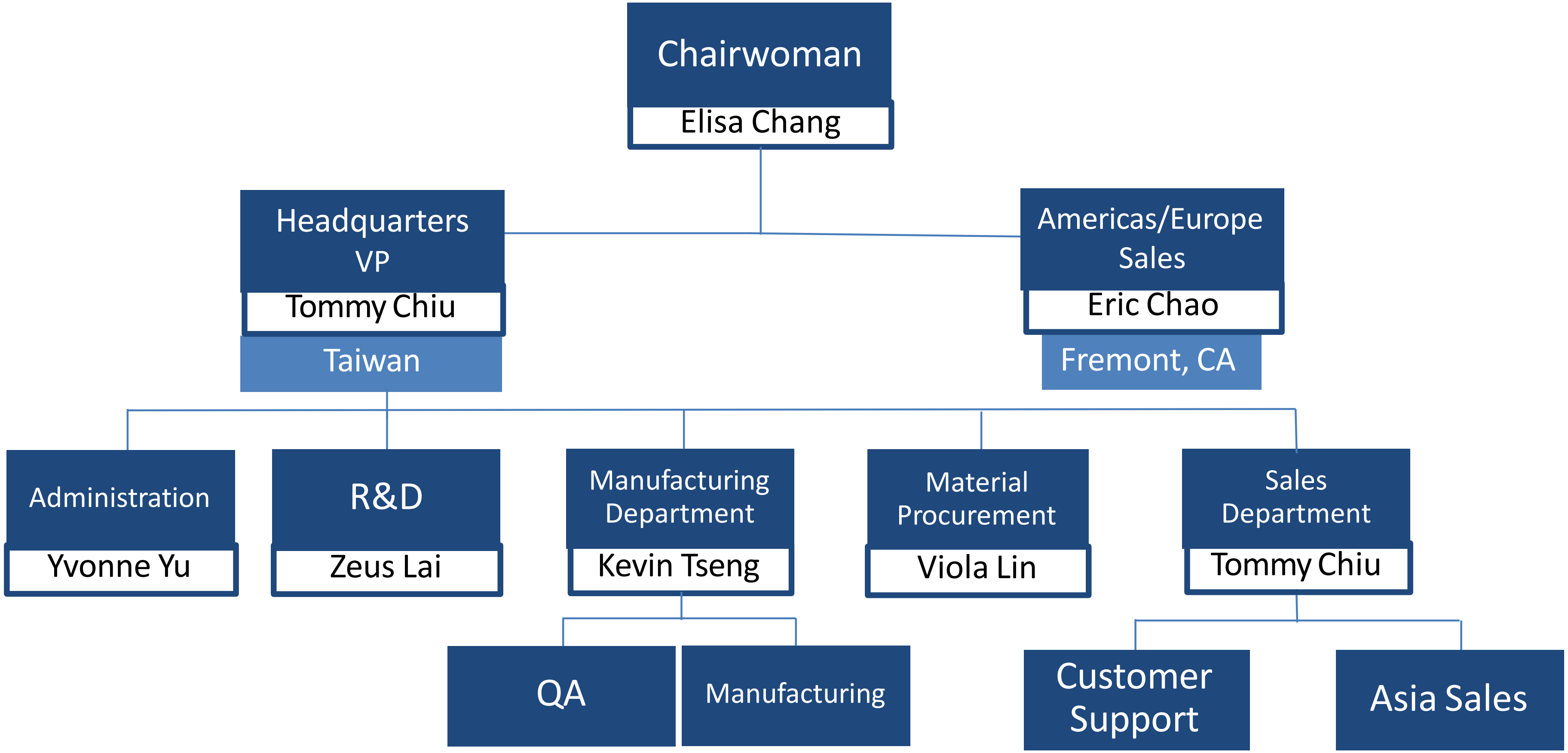
About Us

Established in 2000, Comchip strives to become the leading global semiconductor solutions provider by delivering products and support with cost and quality advantages.

Based in Taiwan, Comchip is constantly expanding in key locations around the world to provide direct, superior customer service. In addition to a sales office and warehouse strategically located in California, Comchip works closely with a comprehensive network of distributor and sales representative partners around to globe.

110+	$30M	$20M
Employees	Revenue	Capital

Comchip Organization



Chairwoman
Elisa Chang

Headquarters VP
Tommy Chiu
Taiwan

Americas/Europe Sales
Eric Chao
Fremont, CA

Administration
Yvonne Yu

R&D
Zeus Lai

Manufacturing Department
Kevin Tseng

Material Procurement
Viola Lin

Sales Department
Tommy Chiu

QA

Manufacturing

Customer Support

Asia Sales

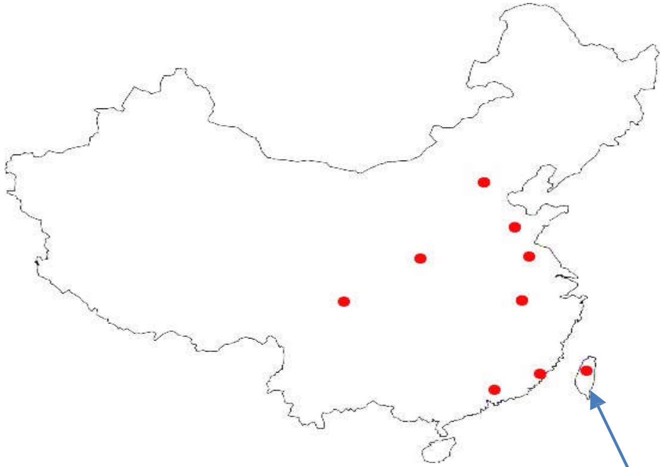
Comchip Business

Model

In-house design and manufacturing of discrete components

OBM
R&D
Manufacturer
Lab
Marketing
Sales

OEM
WLCSP
DFN Series



DFN (Cu)		QC/0402 SOD-882A	QC/0402 SOD-882B	QC/0402 SOD-882C	QC/0402 SOD-882D	UCT/0603T SOD-523T	QCA/0402 SOT-883	ZC/0201 DFN0603	ZC/0201 DFN0603
Package Drawing									
Case Outline Size (mm)	L	0.95 ~ 1.05	0.95 ~ 1.05	0.95 ~ 1.05	0.95 ~ 1.05	1.60 ~ 1.80	0.95 ~ 1.05	0.55 ~ 0.65	0.55 ~ 0.65
	W	0.55 ~ 0.65	0.55 ~ 0.65	0.55 ~ 0.65	0.55 ~ 0.65	0.80 ~ 1.00	0.55 ~ 0.65	0.25 ~ 0.35	0.25 ~ 0.35
	H	0.45 ~ 0.55	0.45 ~ 0.55	0.45 ~ 0.55	0.45 ~ 0.55	0.45 ~ 0.55	0.45 ~ 0.55	0.3 ~ 0.34	0.3 ~ 0.34
Max. Die Size	mm	0.43 * 0.43 * 0.14(H)	0.36 * 0.27 * 0.10(H)	0.43 * 0.43 * 0.14(H)	0.36 * 0.27 * 0.10(H)	0.63 * 0.63 * 0.14(H)	0.43 * 0.43 * 0.14(H)	0.22 * 0.22 * 0.1(H)	0.22 * 0.16 * 0.08(H)
	mil	< 17 mil	< 14 mil	< 17 mil	< 14 mil	< 25 mil	< 17 mil	< 9 mil	< 9 mil
DIE QTY		1 e.a	2 e.a	1 e.a	2 e.a	2 e.a	1 e.a	1 e.a	2 e.a

DFN (Cu)		WCSP/0201 DFN0603	KM/1406 SOD-123ST	KM/1406 SOD-123F	DFN1010-6L	A10C / Array-10Pin DFN2510	A08C / Array-8Pin DFN2010	SOT-383F (FR4)	DFN10P (FR4)
Package Drawing		*new							
Case Outline Size (mm)	L	0.585~0.655	3.55~3.65	3.50 ~ 3.90	0.95~1.05	2.45~2.55	1.95~2.05	2.00 ~ 2.20	2.45 ~ 2.55
	W	0.285~0.355	1.55~1.65	1.40 ~ 1.80	0.95~1.05	0.95~1.05	0.95~1.05	1.50 ~ 1.70	0.95 ~ 1.05
	H	0.235~0.265	0.45 ~ 0.55	1.30 ~ 1.70	0.45~0.55	0.45~0.55	0.45~0.55	0.45 ~ 0.55	0.45 ~ 0.55
Max. Die Size	mm	-	1.45 * 1.1 * 0.15(H)	1.15 * 1.15 * 0.25(H)	0.34*0.34*0.1(H)	0.3 * 0.3 * 0.1(H)	0.3*0.3*0.1	0.60 * 0.80 * 0.13(H)	Single ~ Multi-Chip
	mil	-	< 56 mil	< 45 mil	< 14 mil	< 12 mil	< 12 mil	< 31 mil	-
DIE QTY		-	1 e.a	1 e.a	COL	COL	COL	1 e.a	1~5 e.a

IDM
Design House
Assembly
Reliability Analysis

Wafer fabrication

Taiwan :

EPISIL 漢磊科技特約廠商 Episil Technologies inc.　台灣茂矽電子股份有限公司 MOSEL VITELIC INC.　nuvoTon 新唐科技

Japan : Phenitec

Package

JCET 长电科技　银河微电 Galaxy Microelectronics　扬杰科技 YANGJIE TECHNOLOGY　长晶科技 CHANGJING ELEC.TECH

Package	Capacity /m
DFN Series (OWN)	120 KK
SMD TYPE (OEM)	300 KK

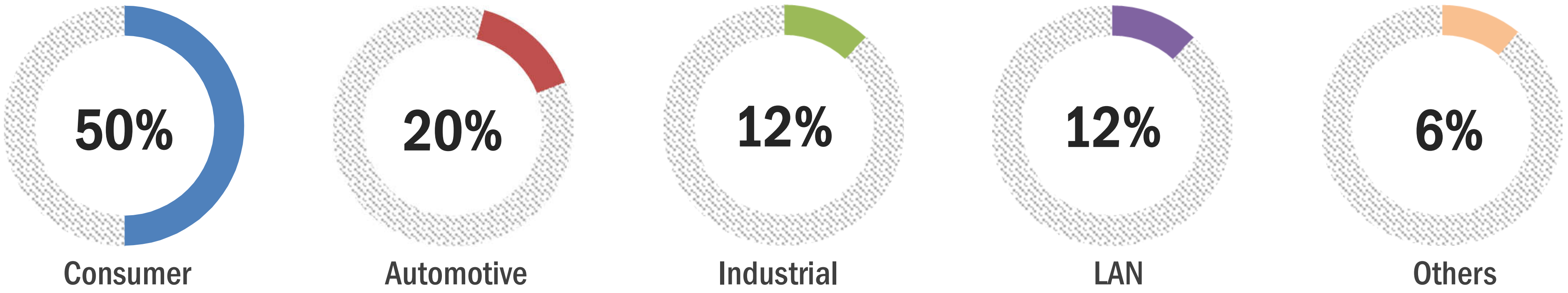
Key Customers (USA)

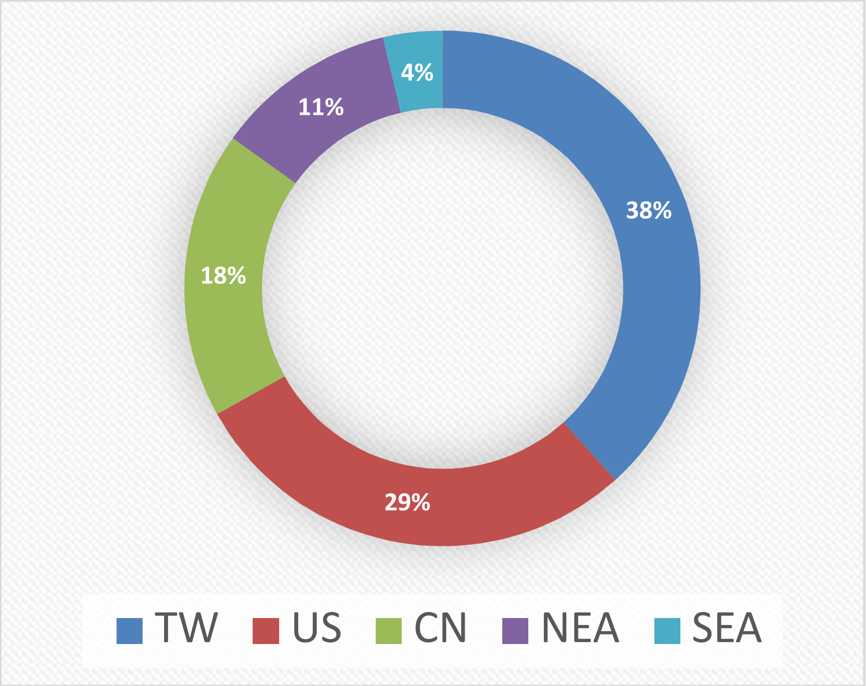
Same-day support for customers of all industries...

Comchip
SMD Diodes Specialist

Market

Revenue





Consumer

amazon
Google
GARMIN
TomTom
AUO
GoPro
hp
CREE LED Lighting
FOXCONN
wacom
SONY
ROKU
POLYCOM
Whirlpool
QUALCOMM
INNOLUX
INNOLUX DISPLAY CORP.
CompalComm 華寶通訊
MEDIATEK
BRAUN
MERRY

Automotive

HYUNDAI
OMRON
Sensing tomorrow
TomTom
GARMIN
BOSCH
Cub
Remy
VINFAST
KIA
Volkswagen
Ford
E-LEAD
Tyco Electronics
LITEON
molex
FIH
Continental
The Future in Motion

Industrial/LAN

PHILIPS
coltène whaledent
Honeywell
Rowe
Control4
GE Security
Ruckus
Cochlear
ZEBRA
THALES
Tyco Electronics
Square
HEATRON
CISCO
ADVANCED BIONICS
ECHOSTAR
RAIN BIRD
The World's Leader in Irrigation.
zollner
Medtronic
DELTA
Baxter
Grote
Next-gen lighting means next-level safety

Product Line-up

DFN & ARRAY	PDFN	SOD	SOT	TO/ITO	DO-218AB
					
ESD Schottky Zener Switch	MOSFET	ESD Schottky Zener Switch TVS	ESD Schottky Zener Switch Transistor MOSFET	Schottky Rectifiers Fast diode MOSFET SiC	TVS

Bridge

SMD: ABS,MB,MBS,DB,DFS.........
DIP: 2GBP,GBP,GBU,GBJ.WOB,GBPC,KBPC........

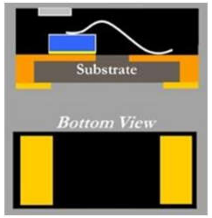
MOSFET

Single: SOT-23, SOD-323,DFN2020,DFN3333,DFN5060,DPAK,SOP8.......
Dual: SOT-23-6, DFN1006-3L, DFN1010-6L,DFN3333,DFN5060,SOP8........

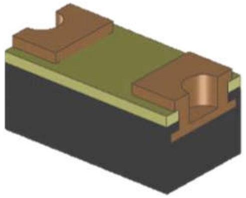
Product Milestones

2004 2007 2008 2009 2011 2012 2012 2014

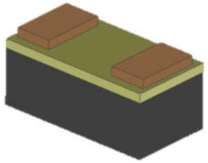
Leadless Package



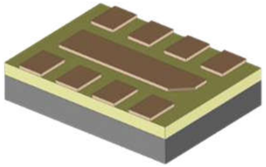
SOD-723



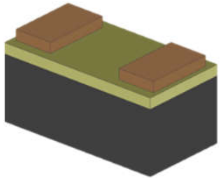
SOD-923



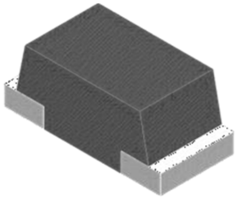
SOT-383



SOD-523



SOD-123KM

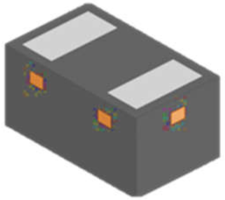


TS16949

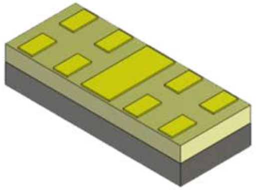
TÜV NORD

CERTIFICATE

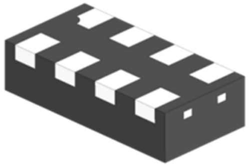
SOD-882



2510 Array-10 Pin FR4



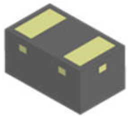
2010 Array-8 Pin Cu



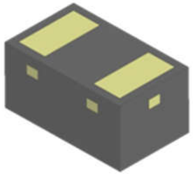
Roadmap

2016

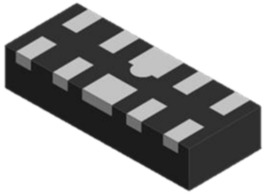
0201



0402

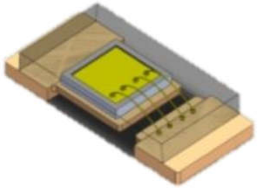


2510 Array-10
Pin Cu



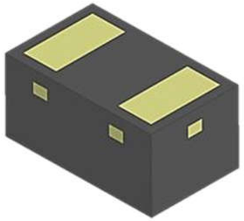
2017

SOD-123ST

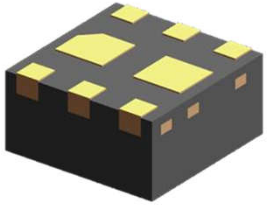


2018

0603 cu

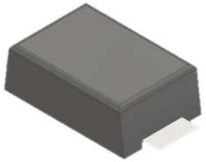


1010 Array-6
Pin Cu



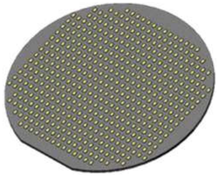
2019

SOD-123FL

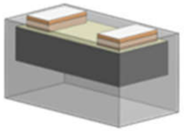


2020

WLCSP Fan-in

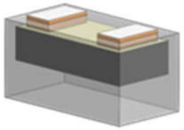


WLCSP 01005
ESD Low Cj

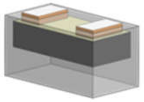


2021

WLCSP
01005
ESD
High Surge

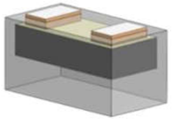


WLCSP 01005
Schottky 0.5 A



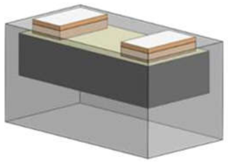
2022

WLCSP0201

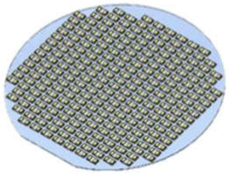


2023

WLCSP 0402

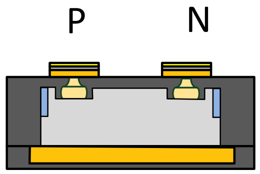


WLCSP
Fan-Out

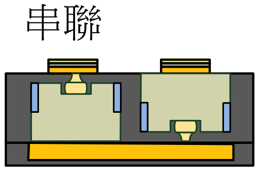


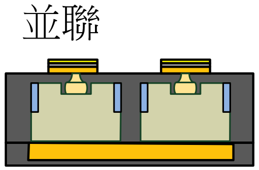
WLCSP Product Roadmap

含散熱片CSP產品
(0402以上封裝)

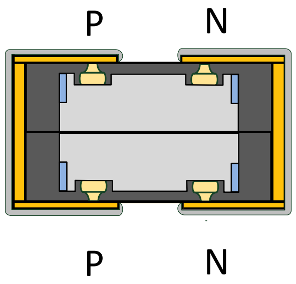


電壓：20~200 V
電流：0.1~2A

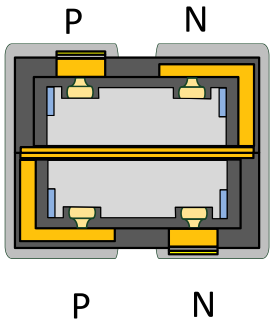




堆疊CSP被動元件封裝產品

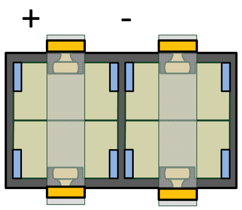


★電流：Io*2
★ IPP：Ipp*2
★ VF：Vf/2
電壓：不變
Cj：Cj*2

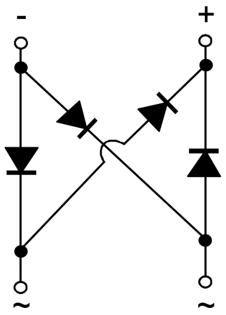


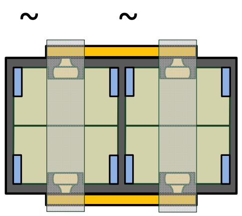
★電壓：VR*2
★ Cj：Cj/2
★ IR：Ir/2
電流：不變
VF：Vf*2
VC：Vc*2

堆疊橋式整流被動元件封裝



左側視圖





右側視圖

In-House Reliability Testing

- In-house lab available to conduct reliability and certification testing
- Current testing standards: AEC-Q101, MIL-STD-750D, JESD22, JIS-C-7021

Automotive

- ☐ Pre-and Post-stress Electrical Test (Follow datasheet)
- ☐ Pre-Conditioning (JESD22 A-113)
- ☐ External Visual (JESD22 B-101)
- ☐ High Temperature Reverse Bias Life (MIL-STD-750 Method 1038 1000 Hours)
- ☐ Stead State Operation Life (MIL-STD-750 Method 1038 1000 Hours)
- ☐ Temperature Cycle (JESD22 A-104)
- ☐ Autoclave (JESD22 A-102)
- ☐ Unbiased Highly Accelerated Stress Test (JEAD22 A-118)
- ☐ High Humidity High Temperature Reverse Bias (JESD22 A-101 1000 Hours)
- ☐ Highly Accelerated Stress Test (JESD22 A-110)
- ☐ Intermittent Operational Life (MIL-STD-750 Method 1037)
- ☐ ESD (AECQ101-001 and Q101-005)
- ☐ Physical Dimension (JESD22 B-100)
- ☐ Resistance to Solder Heat (JESD22 A-111 B-106)
- ☐ Solderability (J-STD-002)
- ☐ Thermal Resistance (JESD24-3,24-4,24-6 as appropriate)
- ☐ Wire Bond Strength (MIL-STD-750 Method 2037)
- ☐ Bond Shear (AEC-Q101-003)
- ☐ Die Shear (MIL-STD-750 Method 2017)

General

- ☐ Solderability (MIL-STD-750 Method 2026)
- ☐ Soldering Heat (MIL-STD-750 Method 2031)
- ☐ Temperature Cycle (MIL-STD-750 Method 1051)
- ☐ Thermal Shock (MIL-STD-750 Method 1056)
- ☐ Stead State Operation Life (MIL-STD-750 Method 1027)
- ☐ High Temperature Reverse Bias Life (MIL-STD-750 Method 1038)
- ☐ Intermittent Forward Operation Life (MIL-STD-750 Method 1036)
- ☐ Pressure Cooker Test (JESD 22-A102)
- ☐ Boiling (100°C 5 Hours)
- ☐ High Temperature Storage Life (MIL-STD-750 Method 1032)
- ☐ Humidity (EIAJ ED-4701)

Certifications

TÜV NORD

CERTIFICATE

Management system as per
ISO 9001: 2015

In accordance with TÜV NORD CERT and TÜV AP Taiwan p

COMCHIP TECHNOLOGY CO., L
No. 586, Jianguo Rd., Yingge Dist.,
New Taipei City 239, Taiwan (R.O.C.)

applies a management system in line with the above standard

Design and Manufacturing of Diodes

Certificate Registration No. 44 100 121928
Audit Report No. TW-2353/2020

Certification Body
at TÜV ASIA PACIFIC LIMITED Taiwan Branch

This certification was conducted in accordance with the TÜV ASIA
procedures based on TÜV NORD CERT auditing and certification p

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TÜV NORD

CERTIFICATE

Management system as per
ISO 14001: 2015

In accordance with TÜV NORD CERT and TÜV AP Taiwan proce

COMCHIP TECHNOLOGY CO., LTD
No. 586, Jianguo Rd., Yingge Dist.,
New Taipei City 239, Taiwan (R.O.C.)

applies a management system in line with the above standard for t

Design and Manufacturing of Diodes

Certificate Registration No. 44 104 072379
Audit Report No. TW-1352/2022

Certification Body
at TÜV ASIA PACIFIC LIMITED Taiwan Branch

This certification was conducted in accordance with the TÜV ASIA PACIF
procedures based on TÜV NORD CERT auditing and certification proced

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TÜV NORD

CERTIFICATE

Management system as per
IATF 16949:2016
(1st edition, 2016-10-01)

Evidence of conformity with the above standard has been furnished and is certified for

Comchip Technology Co., Ltd.
No. 586, Jianguo Rd., Yingge Dist.
New Taipei City 239
Taiwan (R.O.C.)

Scope

Design and manufacturing of diodes

IATF Registration No. 0374745
Certificate Registration No. 44 111 121928

Issue date: 2020-11-08
Expiry date: 2023-11-07

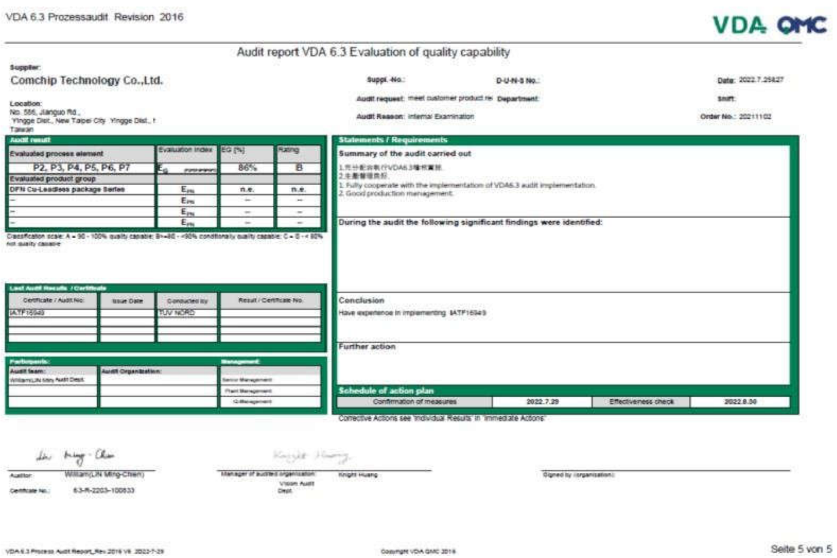
Certification body
at TÜV NORD CERT GmbH

Essen, 2020-11-08

This certification was conducted in accordance with the IATF „Rules for achieving and maintaining IATF recognition"
Validity can be verified at https://www.tuev-nord.de/de/unternehmen/zertifizierung/zertifikatsdatenbank.

TÜV NORD CERT GmbH Langemarckstraße 20 45141 Essen www.tuev-nord-cert.de

03-IAO-QMC 01021 page 1/1 A13F20fe rev. 01/03.19



VDA 6.3 Prozessaudit Revision 2016

VDA QMC

Audit report VDA 6.3 Evaluation of quality capability

Supplier:
Comchip Technology Co.,Ltd.

Location:
No. 586, Jianguo Rd.,
Yingge Dist., New Taipei City Yingge Dist., t
Taiwan

Suppl.-No.:
D-U-N-S No.:
Date: 2022.7.25&27
Audit request: meet customer product re
Department:
Shift:
Audit Reason: internal Examination
Order No.: 20211102

Audit result

Evaluated process element	Evaluation index	EG [%]	Rating
P2, P3, P4, P5, P6, P7	E_G	86%	B
Evaluated product group			
DFN Cu-Leadless package Series	E_{PG}	n.e.	n.e.
--	E_{PG}	--	--
--	E_{PG}	--	--
--	E_{PG}	--	--

Classification scale: A = 90 - 100% quality capable; B>=80 - <90% conditionally quality capable; C = 0 - < 80% not quality capable

Last Audit Results / Certificate

Certificate / Audit No:	Issue Date	Conducted by	Result / Certificate No.
IATF16949		TUV NORD	

Participants:

Audit team:	Audit Organization:	Management:
William(LIN Ming Audit Dept.		Senior Management
		Plant Management
		Q-Management

Statements / Requirements

Summary of the audit carried out
1.[illegible]VDA6.3[illegible].
2.[illegible].
1. Fully cooperate with the implementation of VDA6.3 audit implementation.
2. Good production management.

During the audit the following significant findings were identified:

Conclusion
Have experience in implementing IATF16949

Further action

Schedule of action plan

Confirmation of measures	2022.7.29	Effectiveness check	2022.8.30

Corrective Actions see 'Individual Results' in 'Immediate Actions'

Lin Ming-Chien
Auditor: William(LIN Ming-Chien)
Certificate No.: 63-R-2203-100833

Knight Huang
Manager of audited organization: Knight Huang
Vision Audit Dept.

Signed by (organisation):

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- ISO 9001 Certified Since Oct. 2001
- ISO 14001 Certified Since Feb. 2004
- TS 16949 Certified Since Nov. 2012
- IATF 16949 Certified Since Dec. 2017
- VDA 6.3/2016 Process Audit. Aug. 2022

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THANK YOU

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