



Analog and Discrete  
Power Solutions

# “Power from everywhere”

Diodes Incorporated (DIOD)

December 2025



[www.diodes.com](http://www.diodes.com)

## Oliver Kahle

Regional Sales Manager – North Germany & BeNeLux

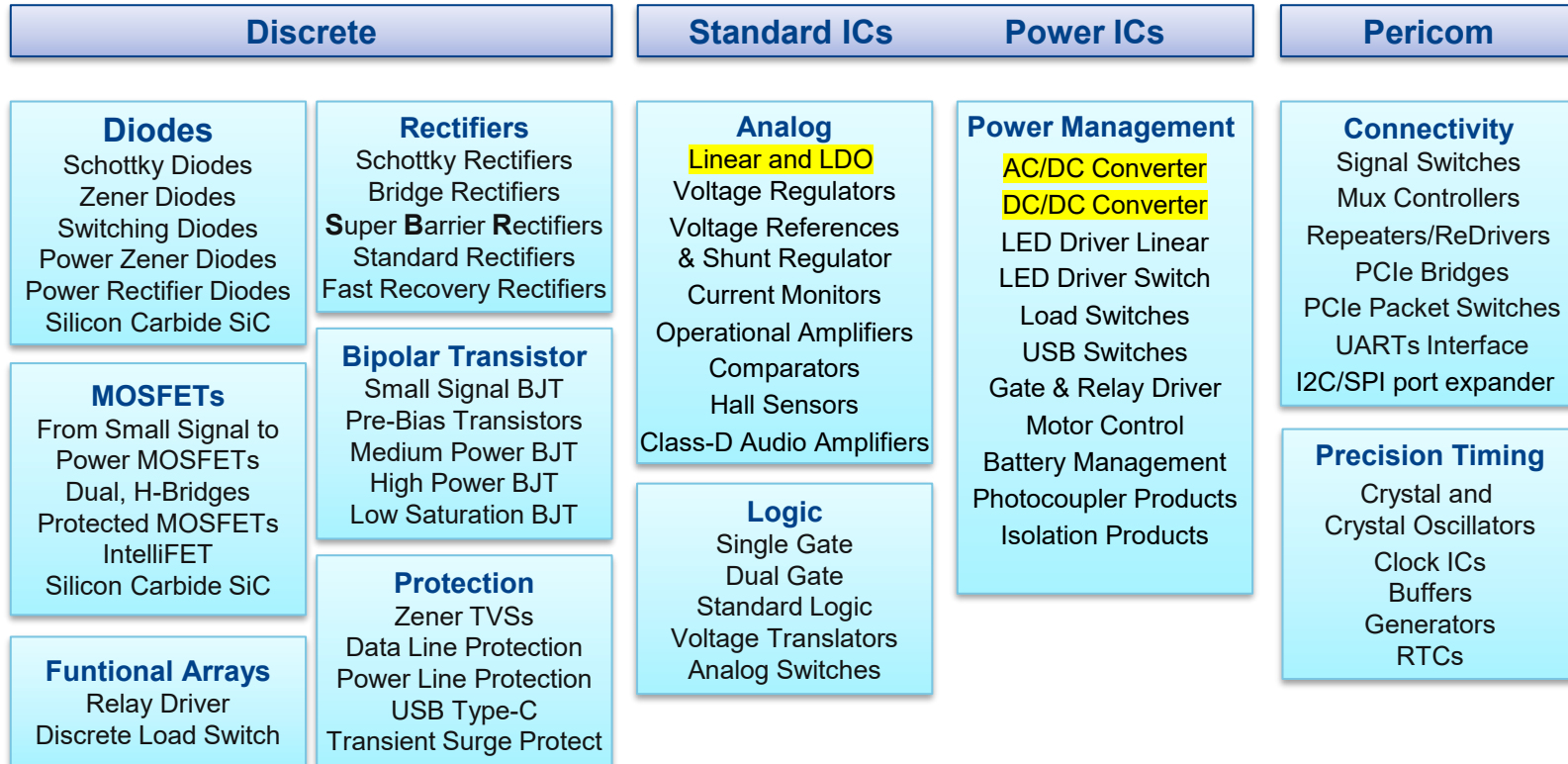


## Roman Kneisel

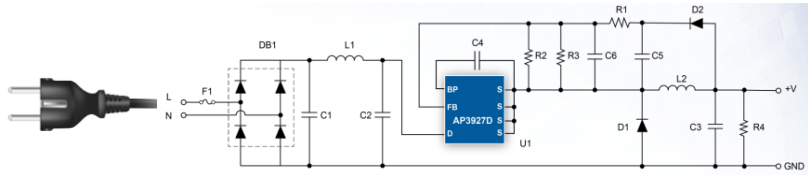
Field Application Engineer – North Germany & BeNeLux

***! Get in touch with your local AvnetSilica contact !***

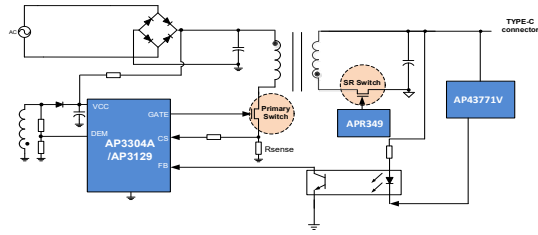
# Broad Product Offering



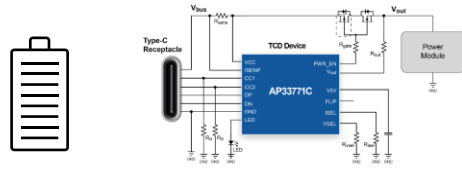
# Diodes Complete Power Solutions



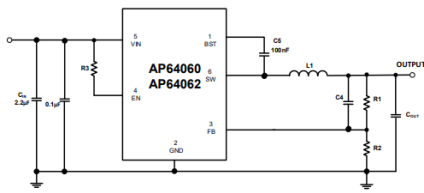
Non-Isolated AC/DC solutions



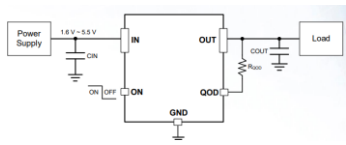
Isolated AC/DC solutions



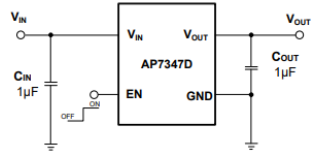
USB Type C



DC/DC Buck & Boost

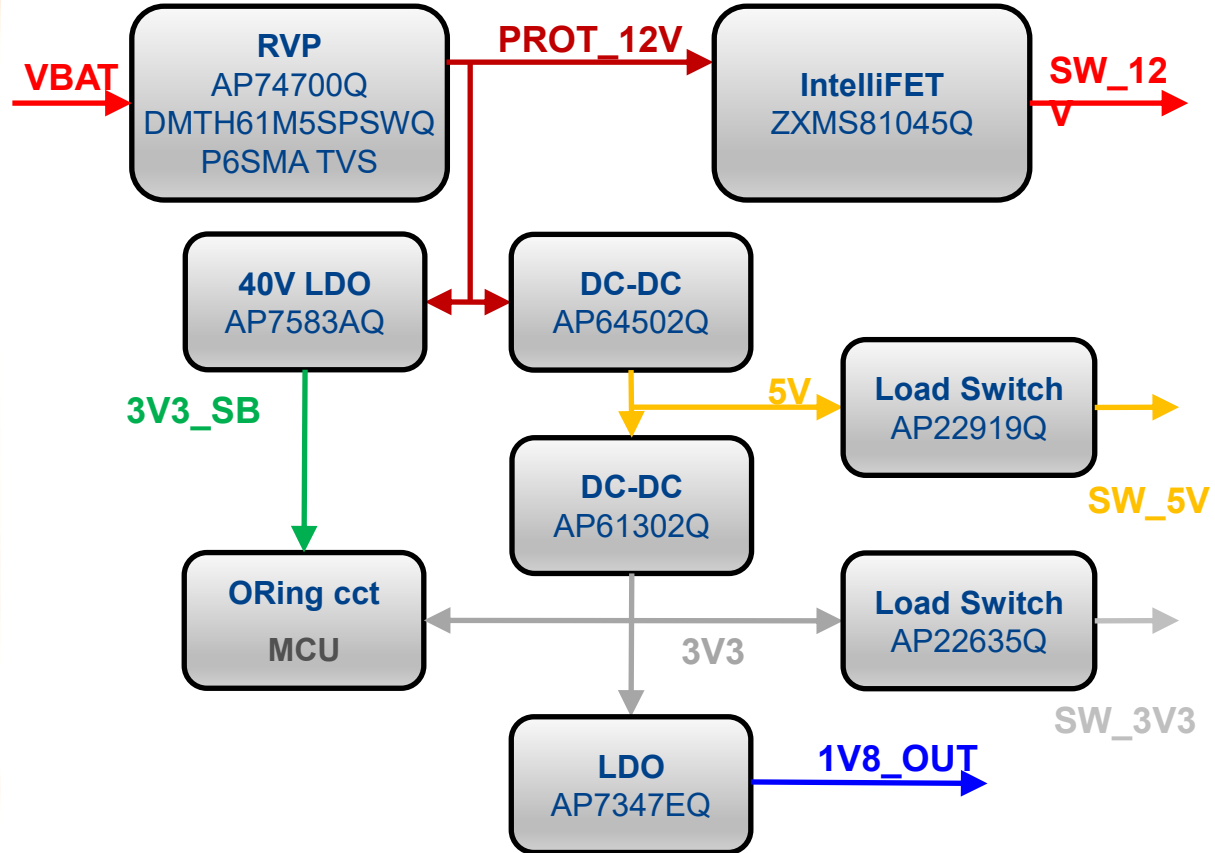


Load Switches

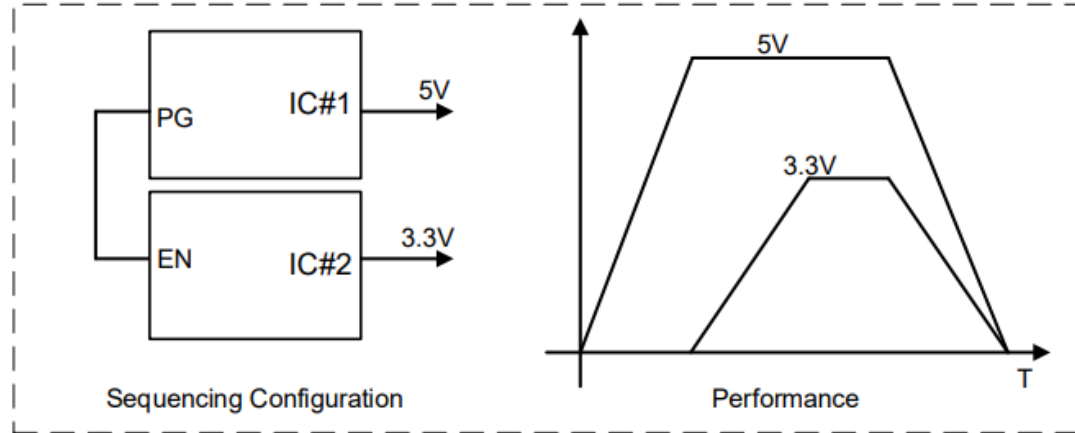
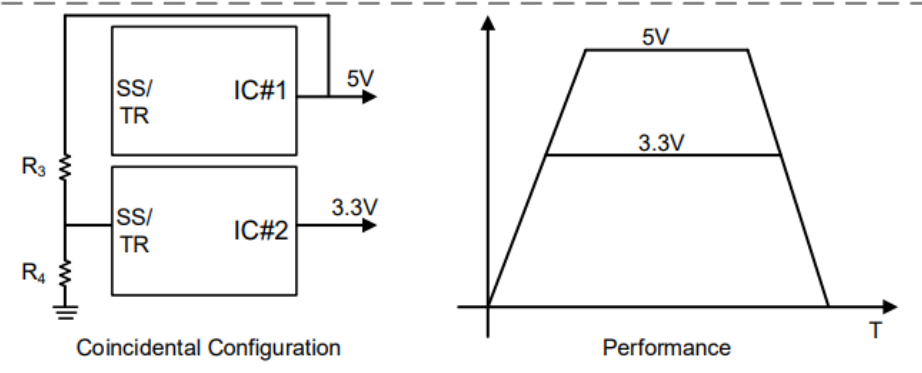
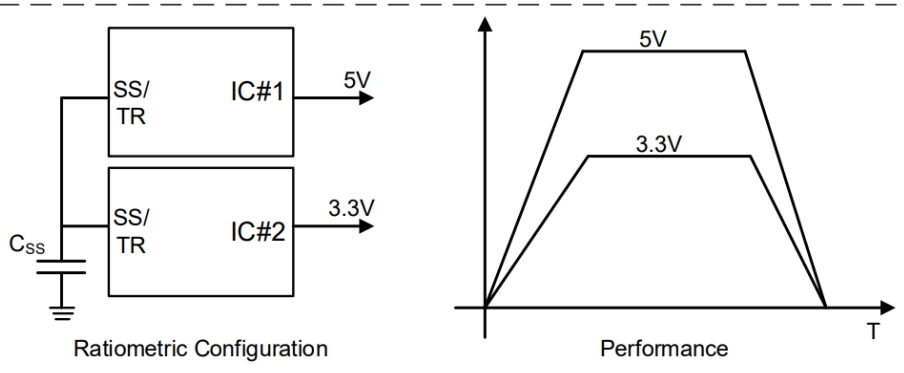


LDO's

# PowerTree Block Diagram



# Enable, Soft-Start, Tracking, Sequencing, and Disable



# DC-DC Buck Converters Product Overview

## Vin (Max) 5.5V

0.4A, AP61040/1

0.6A, AP61062(Q)\*

1A, AP61100(Q)/2(Q)\*

1A, AP3401/3428

2A, AP61200/1/2/3\*

2A, AP61204(Q)\*

3A, AP61300/2(Q)\*

4A, AP61402(Q)\*

4A, AP61406(Q)\*

6A, AP61600 (Q)\*

2/3A, AP61207x/307x

1A-3A, AP61x05x(Q)

## Vin (Max) 18V

1.5A, AP62150\*

2A, AP62200/1/T\*

2.5A, AP62250\*

3A, AP62300/1/T\*

3A, AP62302/3\* (High Eff)

4A, AP62400/1\*

5A, AP62501/2\*

5A, AP62500\*

6A, AP62600\*

8A/17V, AP62800\*

AP62CO5(Q) –  
24V Controller

## Vin (Max) 27/32V

2A, AP6320x(Q)

3A, AP6330x(Q)

3.5A, AP6335x(Q)

2A/27V, LSP5527

3A/27V, LSP5523

## Vin (Max) 36/40V

0.6A, AP64060(Q)

0.6A, AP64060T(Q)

1A, AP6410x(Q)

2A, AP6420x(Q)

3.5A, AP6435x(Q)

5A, AP6450x(Q)

2A, AP64203(Q)

3A, AP64303(Q)

2A/36V, AP6420xx(Q)

3A/36V, AP6430xx(Q)

6A/8A/10A/36V,  
AP64600/800/A00(Q)

AP64CO5(Q) –  
40V Controller

## Vin (Max) 60V

300mA, AP6603x (Q)

600mA, AP6606x (Q)

1A-2A, AP66x0x (Q)

2A, AP66200(Q)

3A, AP66300(Q)

## Vin (Max) 80V/100V

1A-2.5A, AP68xx(Q)

1A, AP6A10x(Q)

0.6A/1A, AP6Axx5(Q)

2.5A-3.5A, AP6Axx5(Q)

AP68CO5(Q) –  
80V Controller

AP6ACO5(Q) –  
100V Controller

Production

Development

Future

# LDO Portfolio and Roadmap

## High PSRR

AP7340 SPFAB  
5.25V/150mA 75dB  
DFN1010-4

AP7341 SPFAB  
5.25V/300mA 75dB  
DFN1010-4

AP7343  
5.25V/300mA 75dB, 0.9Vmin  
DFN1010-4, SOT25

AP7353  
5.5V/250mA 90dB, 10uVrmx  
WLB0707-4, DFN1010-4

AP2127  
6V/300mA 68dB, ADJ (0.8V~5V)  
SOT23/25

AP7343LD/AP7353LD SPFAB  
5.25V/300mA 75dB 1.2VIO  
DFN1010-4

AP7331 SPFAB  
6V/300mA 65dB, ADJ (0.8V~5V)  
SOT25, DFN2020-6

AP2127 SPFAB  
6V/300mA 68dB, ADJ (0.8V~5V)  
SOT23/25

AP743 SPFAB  
6V/300mA EN, ADJ (1.2V~5.5V)  
SOT25

AP73490 SPFAB  
7-CH LDO PMIC  
WLCSP-20

## Low IQ

AP7350  
5.25V/150mA 250nA  
WLB0606-4 (0.35p)

AP7351  
5.5V/150mA 500nA, 0.8Vmin, 60dBm  
DFN1010-4, SOT25

AP7354  
5.5V/150mA 250nA  
DFN1010-4, SOT23/25

Production

Sample Now

Development

Roadmap

AP755 SPFAB  
5.5V/500mA, low Iq, 0.6Vmin  
SOT25/DFN2020-6

AP758 SPFAB  
5.5V/500mA, ADJ (0.5V~5.5V)  
SOT25/DFN2020-6

AP7173 SPFAB  
5.5V/1.5A, VCC, ADJ, SS, PG  
DFN3030-10, SO8-EP

## High Current

AP7179D  
6.5V/3A EN, PG, ADJ, 4.4uVrms  
QFN3535-20

AP7173  
5.5V/1.5A, VCC, ADJ, SS, PG  
DFN3030-10, SO8-EP

AP7361E(A)  
6V/1A, EN, ADJ (0.8V~5V), (PG)  
DFN3030-8, SOT89/223, SO8-EP

AP7366EA  
6V/0.5A EN, ADJ (0.8V~5V)  
DFN2020-6, SOT25

AP7368  
5.5V 0.5A/1A SEL, ADJ  
DFN1612-8

AP7347D  
5.5V/0.5A EN, 75dB  
DFN2020-6, SOT25

AP7347E  
5.5V/0.5A EN, ADJ(1V~5V), PG  
DFN2020-6, DFN3030-8

AP7361x, AP7366xSPFAB  
6V/1A, 600mA EN, ADJ(0.8V~5V)  
DFN3030-8,DFN2020-6 ,SOT25

AP745E SPFAB  
6V/0.5A, PG, ADJ(0.55~5.5V)  
DFN2020-6, DFN3030-8

AP746E SPFAB  
6V/1A, PG, ADJ(0.55~5.5V)  
DFN2020-6, DFN3030-8

## Wide VIN

AP7387  
60V/150mA 2uA Iq  
SOT23/25/89, DFN2020-6

AP7375  
45V/300mA EN 2.1uA Iq  
SOT23/25/89, DFN2020-6

AP2205  
24V/200mA EN, ADJ  
SOT25/89

AP2210  
13.2V/300mA EN, ADJ/BYP  
SOT23/25

AZ1117C  
15V/800mA, ADJ  
SOT89/SOT223/TO252-2

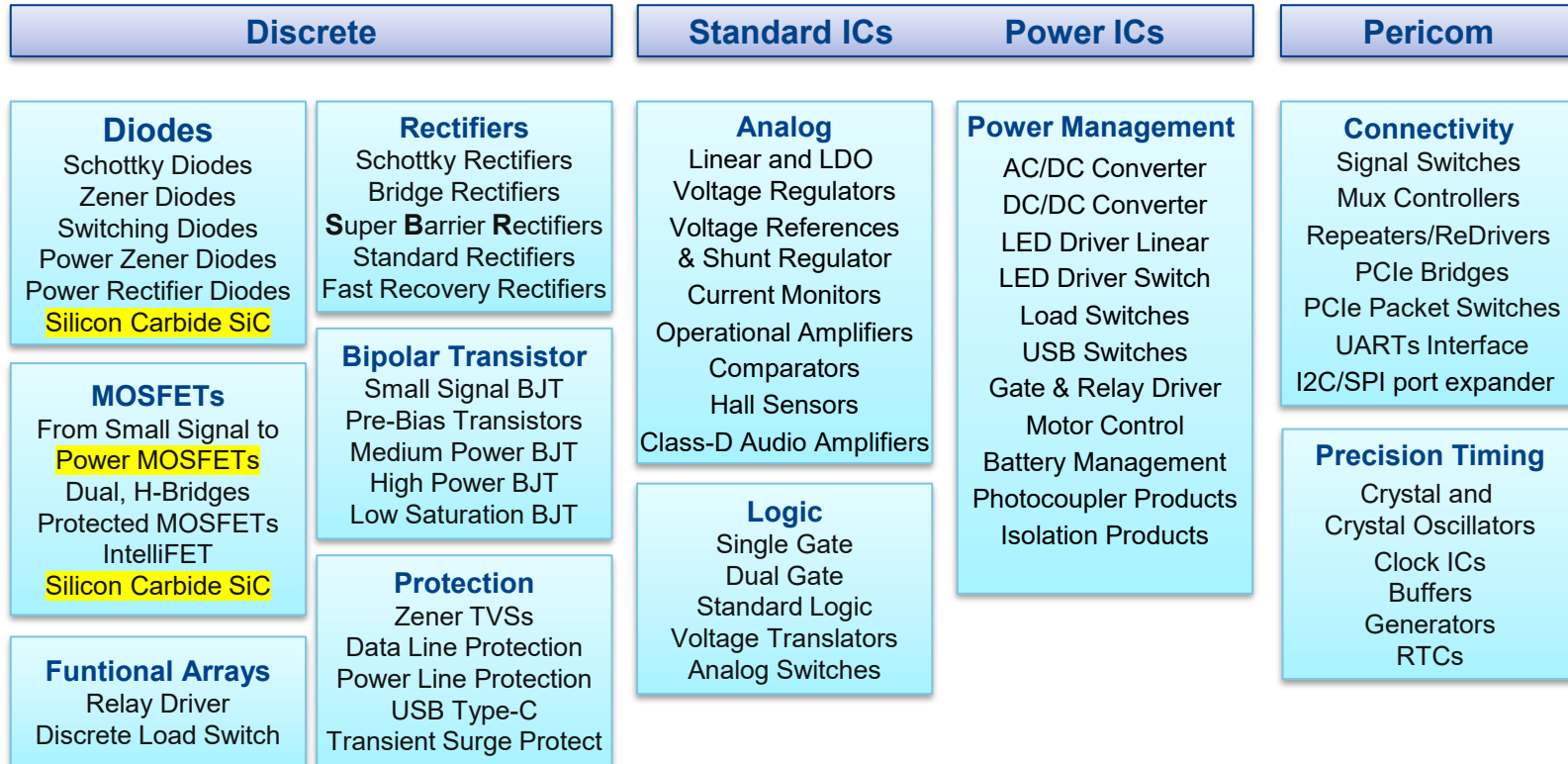
AZ1117I  
15V/1A, ADJ  
SOT223/TO252-2

AP7371  
24V/150mA 2.5uA Iq  
SOT23/25/89

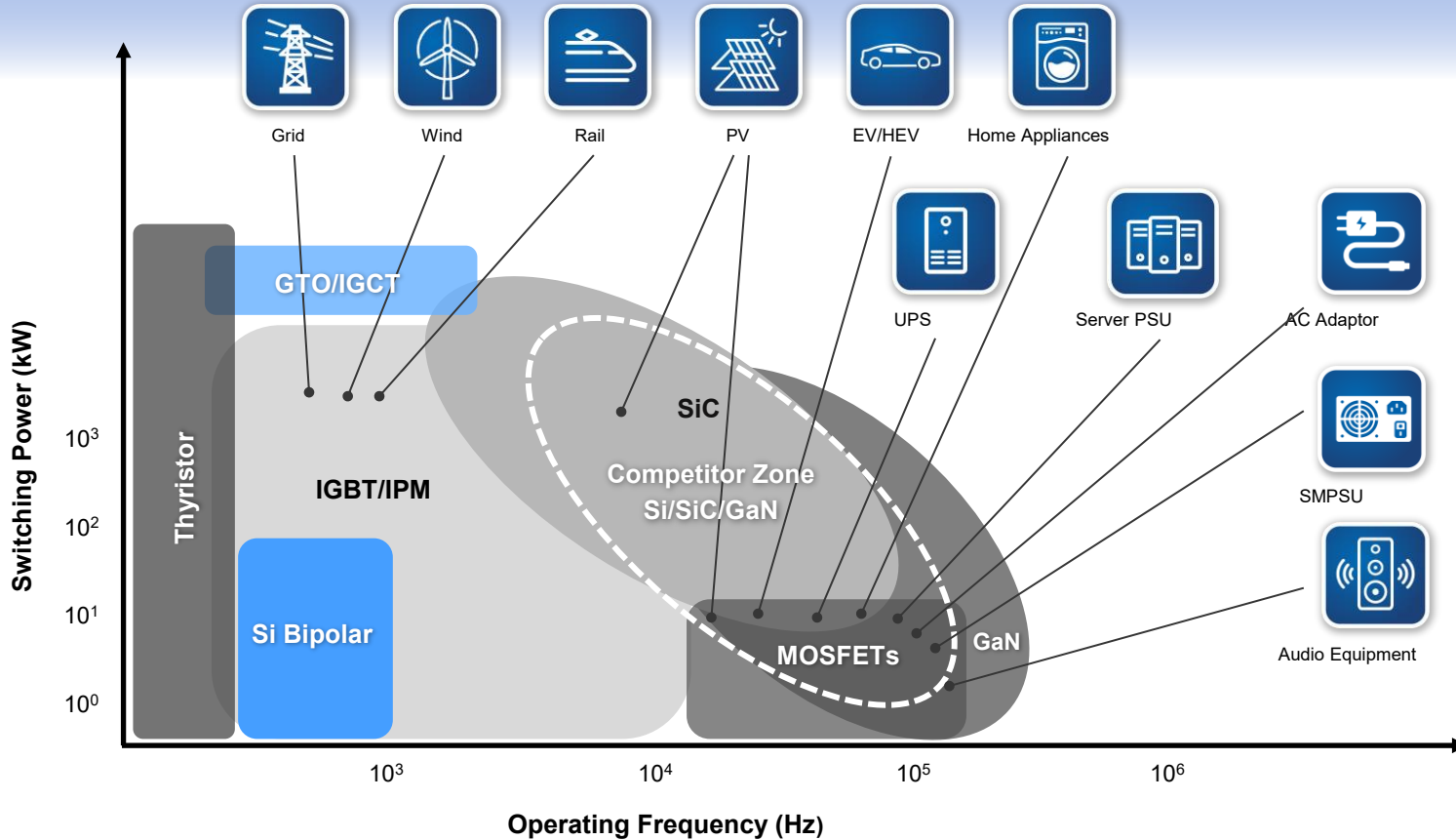
AP7372  
20V/200mA EN, ADJ, 90dB, SS  
WLB1012-6 (0.4p)

AP7379  
16V/1A EN, ADJ (0.8V~14.6V)  
DFN2020-6/MSOP8-EP/SOT25

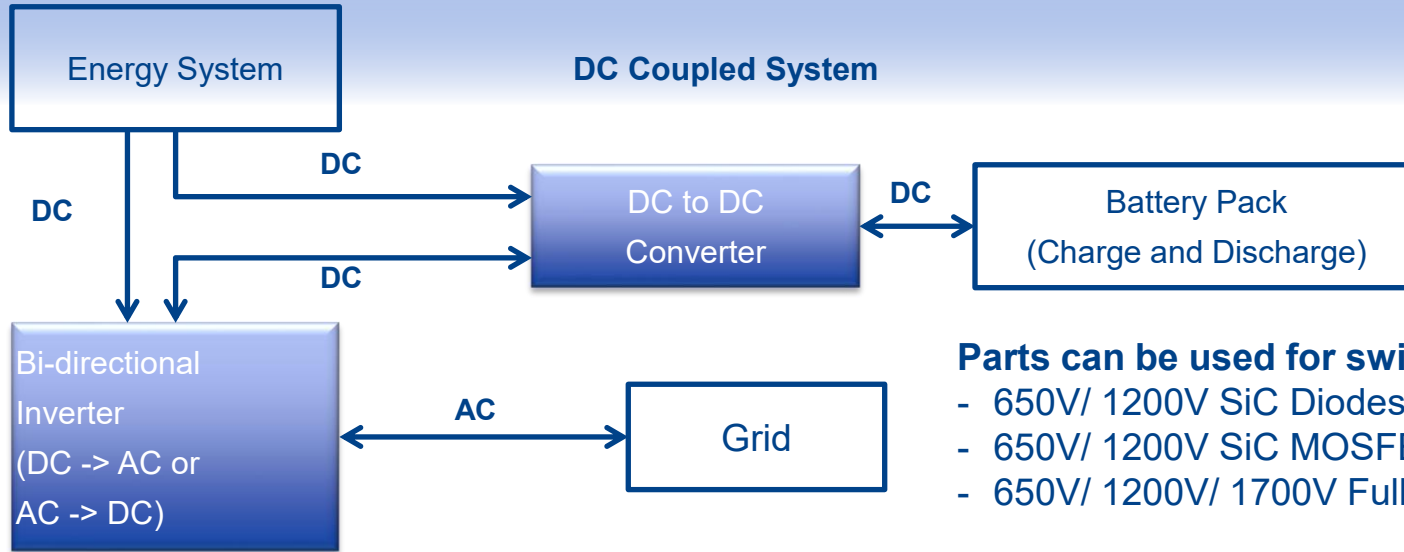
# Broad Product Offering



# Power Device Technology Positioning

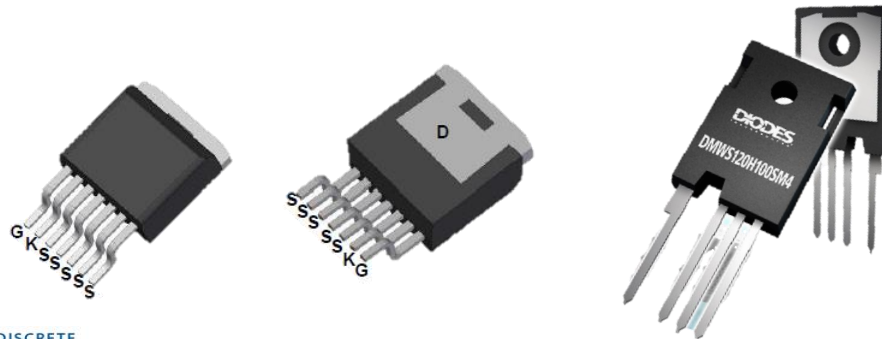


# SiC / MOS FET Applications



## Parts can be used for switching:

- 650V/ 1200V SiC Diodes
- 650V/ 1200V SiC MOSFETs
- 650V/ 1200V/ 1700V Full SiC Modules



# SiC MOSFET Product Roadmap

RTM






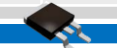






Development

MOS Products	Application	25Q1	Q2	Q3	Q4	26Q1	Q2	Q3	Q4
1200V, 20mR (TO247-3, TO247-4, TO263-7)	OBC, Charger station, Traction inverter								
1200V, 33mR (TO247-3, TO247-4)	Energy Storage system, PV inverter, DC-DC inverter, HVAC, AI server								
1200V, 75mR (TO247-3, TO247-4, TO263-7)									
1200V, 33mR (TO263-7, T2PAK)									GC+1
1200V, 15mR (TO247-3, TO247-4, T2PAK)									GC+1
1700V, 850mR (TO247-3, TO247-4, TO263-7)			TO247-4		TO263-7				
1200V, 75mR T2PAK									Top side cooling package GC+1
900V, 15mR TSCPACK, TO247-3, TO247-4, TO263-7									Top side cooling package Portfolio expansion and GC+1
650V/750V, 6-25mR/45mR/60mR (TO247-3, TO247-4, TO263-7)									Platform ready for GC+1
1200V 20mR/33mR/75mR QDPAK									Platform ready for GC+1
650V/750V, 6-25mR/45mR/60mR Powerdi1012(TOLL)									Platform ready for GC+1
650V/750V, 6-25mR/45mR/60mR Powerdi1015(TOLT)									Platform ready for GC+1
1200V, 8mR (TO247, TO263-7, T2PAK)									Platform ready GC+1

This preser

# SiC Product Plan For SchottkyBarrierDiodes

RTM Development

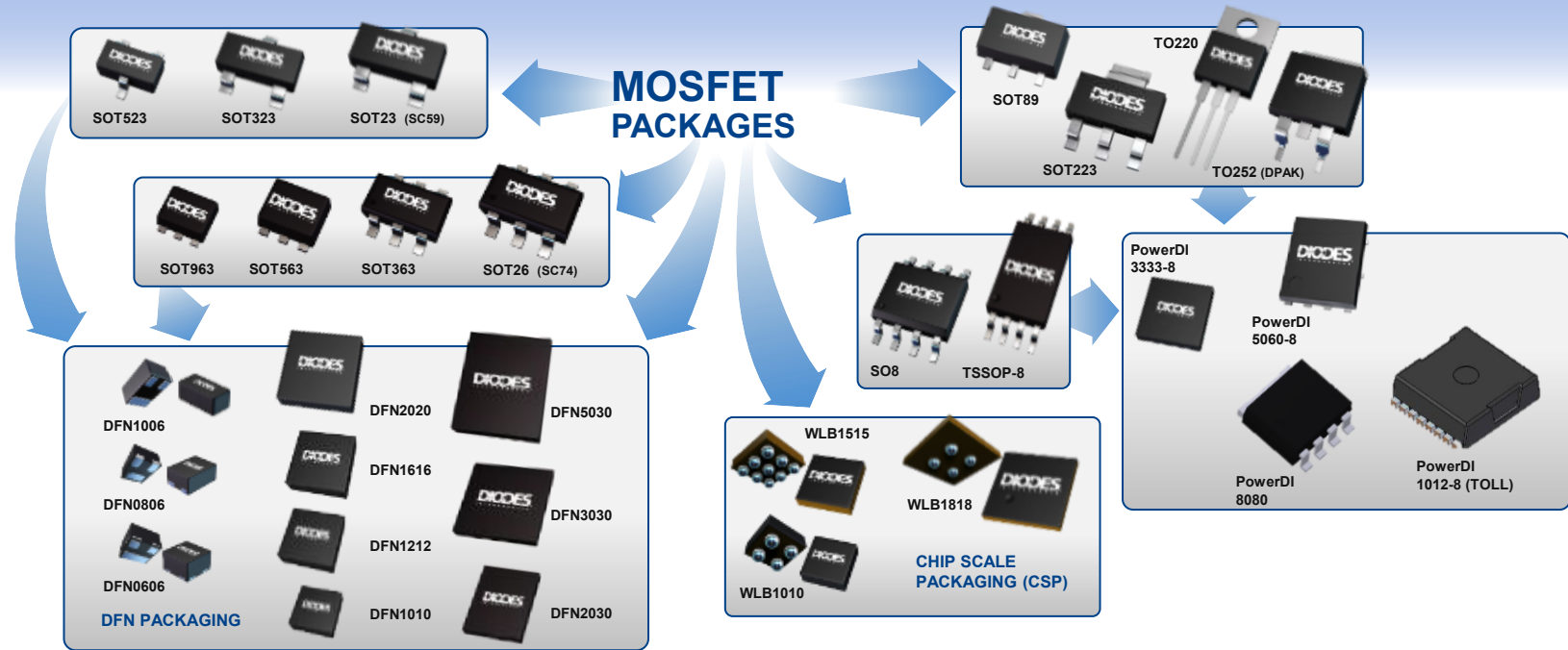
650V	Application		25Q1	Q2	Q3	Q4	26Q1	Q2	Q3	Q4
4A~10A, Gen2 650V, (TO220, ITO220, TO252)	PFC, OBC, Energy Storage System, Charger Station 									
4A~12A, Gen2 650V, <b>DFN8080</b>										
10A, Gen2 650V, <b>TO247-2L</b>										
50A, Gen2 650V, <b>T2PAK</b>		 <b>Top side cooling package</b>								
20A, Gen2 650V, <b>TO263AB</b>										
Gen3, TO220/DFN8080 (performance improvement)		<b>Platform ready and Portfolio expansion in variety package</b>								
1200V	Application		25Q1	Q2	Q3	Q4	26Q1	Q2	Q3	Q4
2~10A, Gen1 1200V, (TO220, ITO220, TO252)	OBC, Energy Storage System, Charger Station, UPS 									
5A/10A/20A, Gen2 1200V, (TO220, ITO220, TO252, TO263)										
20A/50A, Gen2 1200V, <b>TO247-2L</b>										
50A, Gen2 1200V, <b>T2PAK</b>										
<b>2A, 1200V, SMB</b>										

This presentation contains Diodes proprietary and confidential information



DISCRETE  
ANALOG  
LOGIC  
MIXED-SIGNAL




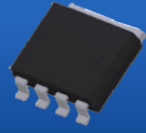
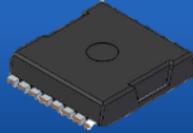

# Diodes Inc. MOSFET Portfolio



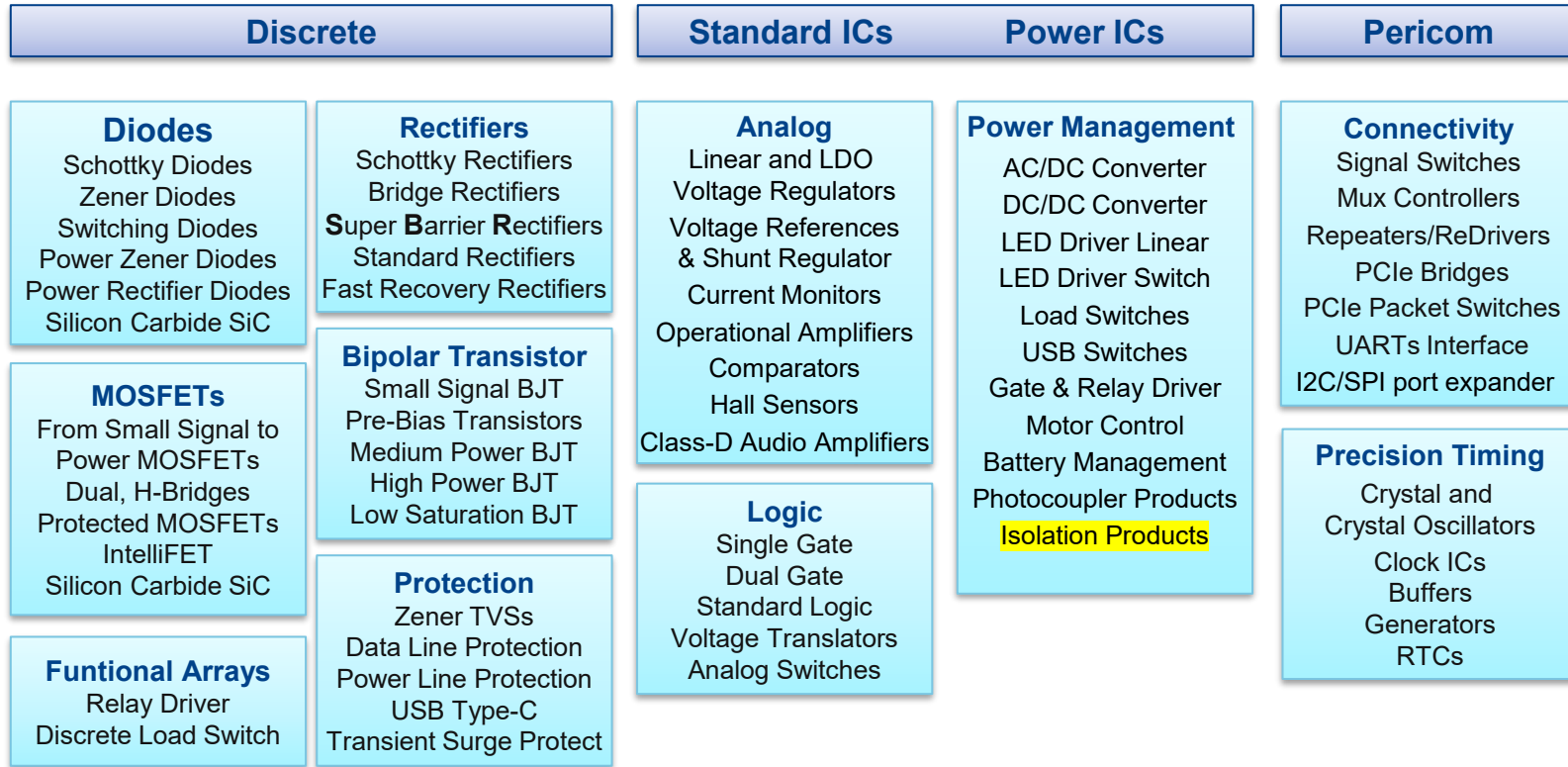
- 800+ MOSFETs from Small-Signal to Power MOSFETs
- BVDSS from 8 to 700V
- Automotive-compliant (Q) – AEC-Qualified. Manufactured in IATF 16949 certified sites supporting PPAP documents
- N channel, P channel, Duals, Quads
- In-house assembly provides an extensive packaging capability
- More mass production packages are available.

# High Temp MOSFET Matrix – Lowest Rdson by Package

17

Polarity	VDS  (V)	RDS(ON)Max @ VGS(10V) (mΩ)	 DFN2020	 PowerDI3333	 PowerDI5060	 PowerDI8080	 PowerDI1012	 TO252
N	30	0.55			DMTH3M70LPSWQ			
		4						DMTH3004LK3Q
		5.5		DMTH3004LFGQ				
	40	0.7					DMTH4M70SPGWQ	
		0.75				DMTH4M75LPSWQ		
		3		DMTH43M8LFGQ				DMTH4004LK3Q
	60	11.5	DMTH4008LDFWQ					
		0.85					DMTH6M70SPGWQ	
		1.5				DMTH61M5SPSWQ		
		3.8						DMTH6004SK3Q
	80	3.9		DMTH63M5LFGQ				
		18	DMTH6016LDFWQ					
		1.2					DMTH81M2SPGWQ	
		1.7						DMTH8001STLWQ
	100	2.6				DMTH82M6SPSWQ		
		6.9		DMTH8008LFGQ				
		16						DMTH8012LK3Q
		2					DMTH10H1M7STLWQ	
P	30	3.2			DMTH10H2M2SPSQ			
		14					DMTH10H015SK3Q	
	40	3.8			DMPH33M8SPSWQ			
		7.5			DMPH3010LPSQ			
		10			DMPH4015SPSQ			
		11					DMP4015SK3Q	
60	25		DMPH4025SFVWQ					
	33							
	50		DMPH6050SFGQ					

# Broad Product Offering



# RobustISO

Over **40 years** predicted  
isolation barrier lifetime

# Diodes Isolation Technology

RobustISO™

## ■ Caps

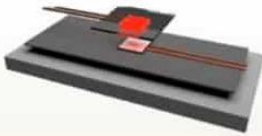

- Skyworks
- TI
- Diodes

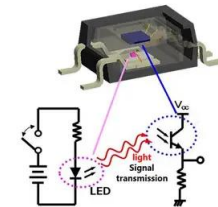
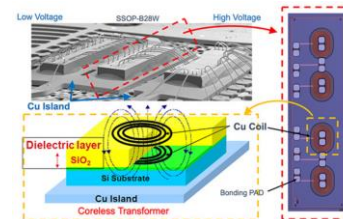
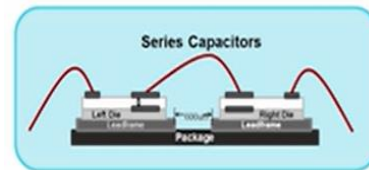
## ■ Magnetics

- Infineon
- ADI
- ST

## ■ Optical

- Toshiba
- Avago

CAPACITIVE	INDUCTIVE	OPTICAL
		
		
		
<p>High speed Low emissions High immunity High reliability/stability</p>	<p>High speed High emissions Low immunity High reliability/stability</p>	<p>Low speed Low emissions Low immunity &amp; stability No external power supply</p>



# Diodes Isolation Products Plan

## Isolation & Charge 2025~2026

Digital Isolator	Package	Isolated gate driver	Package
API7720/F	SO8, SO8W	API21550	SO14W, SO16W, SO16
API7721/F	SO8, SO8W	API21551	SO14W, SO16W, SO16
API7722/F	SO8, SO8W	API21552	SO14W, SO16W, SO16
API7820/F	SO16WW	API21553	SO14W, SO16W, SO16
API7821/F	SO16WW	API21520	SO16W
API7740/F	SSOP16, SO16W	API21530	SO14W
API7741/F	SSOP16, SO16W	API5350M	SO8, SO8W
API7742/F	SSOP16, SO16W	API5350S	SO8, SO8W
API7760/F	SSOP16, SO16W		
API7761/F	SSOP16, SO16W		
API7762/F	SSOP16, SO16W		
API7763/F	SSOP16, SO16W		

 **RTM in 2025**  
 **Developing  
RTM in 2026**

# New API772xQ/782x – 2 CH Digital Isolator, 100Mbps

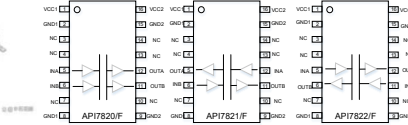
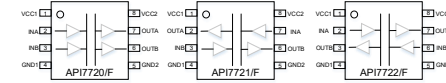
RobustISO™

## Diodes Part:

API772x - Basic and Reinforce 2-CH Digital Isolator

## Diodes Advantage:

- Up to 100Mbps Max Data rate;
- High CMTI immunity: >150V/ns;
- Full P2P to market high runners;
- Full package types;
- Isolation safety certification, UL, VDE, CQC(planned)



## Package type:

- SO8 (150mil)
- SO8W (300mil)
- SO16WW(550mil)

## Application:

- Automotive OBC, BMS
- Industrial Automation
- Electric Power System

Part Number	Channel	Direction	Package	Isolation	TI Code	Silicon Lab	ADI	NovoSense	RTP
<b>2 Channel Digital Isolator, 100Mbps</b>									
API7720	2	2/0	SO8 SO8W	3/5kV	ISO7720/21	Si8620/21/22	ADuM12x ADuM22x ADuM32x	NSI822x NSI822xC	3Q25
API7721		1/1			ISO6720/21/22				
API7722		1/1							
API7820	2	2/0	SO16WW (550mil)	5kV	ISO7820	-	-		
API7821		1/1			ISO7821	-	-		



Analog and Discrete  
Power Solutions

# New API2155xQ – Dual Channel Isolated Gate Driver, 4A/6A

RobustISO™

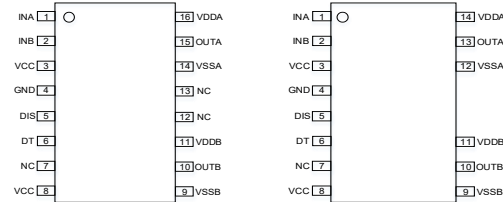
## Diodes Part:

API21550/1/2/3 - Basic and Reinforce isolated High/Low or Dual Gate driver



## Diodes Advantage:

- P2P to popular competitors;
- High/Low & Dual version with DIS or EN Options
- Enhance noise immunity robustness and protections
- Multi. Version for MOSFET, IGBT, GaN or SiC
- Isolation safety certification, UL, VDE, CQC(planned)

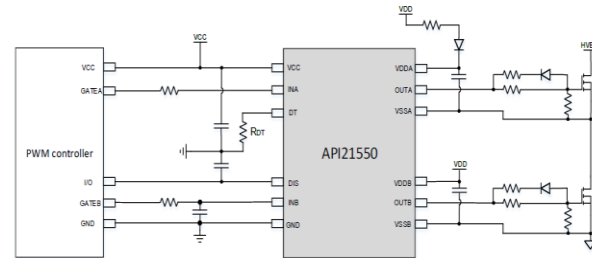


## Package type:

- SO14W(300mil),
- SO16W(300mil),
- SO16(150mil)

## Application:

- Automotive OBC,
- Industrial or Solar Inverter
- Telecom Station



PN	Package	Isolation	TI Code	Silicon Lab	Infineon*	Onsemi	NovoSense	RTP
<b>6V VCCI, HS/LS and Dual</b>								
API21550	SOIC14 300mil	3/5.7KV	UCC21540/42	Si823(H)x	2EDR8258/9	NCx51560/1/3	NSI6602	4Q25
API21551	SOIC16 300mil		UCC21550/51		2EDF8265H/75F			
API21552	SOIC16 150mil		UCC21220/2		2EDF9265H/75F			
API21553					(if Vcc<6V)			



**Thank you**