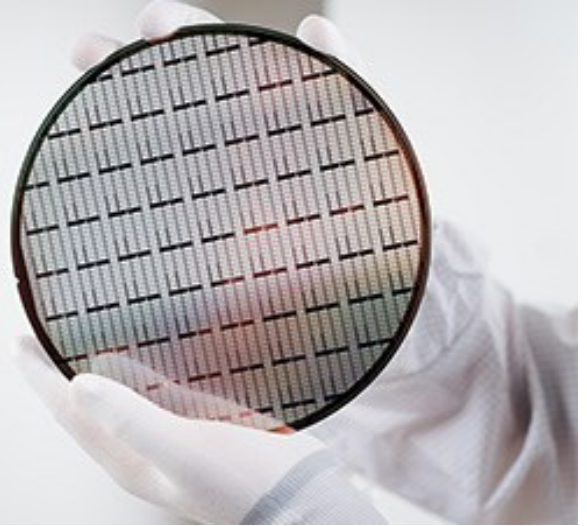


New Product Introduction



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August 2025

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OptiMOS™ 7 40 V motor-drives optimized power MOSFETs



Infineon's OptiMOS™ 7 motor-drives optimized MOSFETs offer tailored solutions for efficient power conversion in drives, power and gardening tools. The portfolio includes the new 40 V family with additional voltage nodes coming and is available in PQFN 3.3 x 3.3 and PQFN 5 x 6 / SuperS08 packages.

Features

- > Best-in-class $R_{DS(on)}$
- > Price-performance optimized portfolio
- > 3x wider SOA
- > Short-circuit current limitation
- > Higher threshold voltage V_{th} up to 3.2 V
- > Controlled transconductance g_{fs}

Benefits

- > Enhanced efficiency
- > Superior performance
- > Improved robustness in harsh conditions
- > Improved pulse current handling
- > Immunity vs. short-circuit events
- > Immunity vs. parasitic turn-on events
- > Intrinsic short current limitation
- > Improved slew rate control
- > Better EMI behavior and ease of use

Competitive advantage

- > With up to 20% reduced conduction loss, best-in-class 0.5 m Ω $R_{DS(on)}$ and 3x wider SOA, the OptiMOS™ 7 motor-drives optimized ensures unmatched efficiency, reliability and optimized price-performance for motor-drive applications. It offers up to 70% improved controllability, enhanced current sharing, and superior EMI performance.

Target applications

- > Power tools
- > Cordless power tools and outdoor power equipment
- > Cordless vacuum cleaners
- > Non-stackable BMS solutions
- > Low-power BDC/BLDC motor drive up to 72 V

Product collaterals / Online support

[Product family page](#)

Product overview incl. datasheet link

OPN	SP Number	Registerable	MDQ	MQQ	MOQ	Package
ISCH54N04NM7VATMA1	SP006053459	Y	4891	4891	5000	PG-TDSON-8
ISCH69N04NM7VATMA1	SP006064933	Y	5911	5911	5000	PG-TDSON-8
ISCH99N04NM7VATMA1	SP006065079	Y	7274	7274	5000	PG-TDSON-8
ISC011N04NM7VATMA1	SP006065104	Y	8443	8443	5000	PG-TDSON-8
ISC012N04NM7VATMA1	SP006065126	Y	10060	10060	5000	PG-TDSON-8
ISC016N04NM7VATMA1	SP006064908	Y	13446	13446	5000	PG-TDSON-8
ISZ015N04NM7VATMA1	SP006064899	Y	10664	10664	5000	PG-TSDSON-8

OptiMOS™ 6 200 V MOSFETs

Infineon's new OptiMOS™ 6 200 V technology was designed to fulfill the requirements of a wide range of applications: from static switching applications to high frequency applications in hard and soft switching.

The OptiMOS™ 6 200 V technology is employing an advanced cell structure to enable industries lowest $R_{DS(on)}$ and Q_{rr} in 200 V. This enables unparallel efficiency, power density compared to the previous generation.



Features

- > Industries lowest $R_{DS(on)}$ in 200 V
- > Industries lowest Q_{rr} in 200 V
- > Compared to previous 200 V technology
 - > Up to 42 % lower $R_{DS(on)}$
 - > Up to 89 % lower $Q_{rr(typ)}$
 - > 36 % lower FOMg
 - > More than 3 times softer diode
 - > Improved capacitance linearity
 - > Improved SOA
- > Tight $V_{gs(th)}$ spread of +/-750 mV
- > High avalanche ruggedness
- > Max T_j of 175° C and MSL1

Benefits

- > Low conduction and switching losses
- > Stable operation with improved EMI
- > Better current sharing when paralleling
- > Enhanced robustness
- > Improved system reliability

Competitive advantage

- > Industry lowest $R_{DS(on)}$ and Q_{rr} in 200 V
- > High efficiency and power density
- > Improved price performance compared to the previous generation
- > Better performance and lower price alternatives to address existing Market segments
- > High reliability

Target applications

- > SMPS in telecom. server. high power chargers
- > Renewables like solar EES
- > Drives in a wide range of applications: forklift, LEV, battery powered applications, robots and drones, servo drives
- > Battery protection in the battery management system (BMS)
- > Audio

Product collaterals / Online support

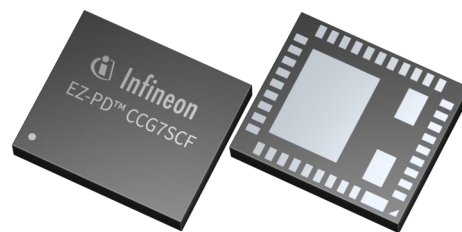
[Product family page](#)

Product overview incl. datasheet link

OPN	SP Number	Registerable	MDQ	MQQ	MOQ	Package
IPP175N20NM6AKSA1	SP006070086	Y	5417	5417	500	PG-TO220-3
IPB175N20NM6ATMA1	SP006070078	Y	3985	3985	1000	PG-TO263-3

EZ-PD™ CCG7SCF consumer USB-C power delivery and DC-DC controller

EZ-PD™ CCG7SCF is a USB-C PD controller product family that offers a highly integrated USB Type-C power delivery solution for consumer charging applications. It features a single-port USB-C PD controller and DC-DC converter and EZ-PD™ CCG7DC features a dual-port USB-C PD controller and dual-channel DC-DC converter. EZ-PD™ CCG7SCF features a single-port USB-C PD controller, DC-DC converter and additionally integrates FETs.



Features

- > USB PD 3.2 compliance
- > ARM® Cortex®-M0 processor MCU
- > 128 KB flash 16 KB RAM 32 KB ROM
- > Apple 2.4 A, BC 1.2, AFC, and QC 5.0
- > Support buck and buck-boost config
- > w/o. FETs integration
- > Configurable DC-DC converters
- > DC-DC supports PSM and FCCM modes
- > 5 - 24 V input operating voltage
- > CC and I2C firmware upgrade
- > GPIOs, SCBs, and TCPWMs
- > Support firmware upgrade

Benefits

- > Highly integrated and programmable single-port USB type-C PD and DC-DC controller
- > Support USB PD 3.2 SPR, BC 1.2, Apple charging, Samsung AFC, QC 5.0 fast charging standard
- > DC-DC support forced-buck and buck-boost configuration
- > DC-DC supports 150 kHz to 600 kHz switching frequency
- > DC-DC supports FCCM and PSM mode
- > DC-DC supports peak current cycle-by-cycle duty-limit control
- > Integrate buck FETs for low system cost
- > Fault protection includes OVP, UVP, SCP, OTP, V_{CONN} OCP, and VBUS-CC short
- > Support features such as dynamic load-sharing, cable compensation, black box, and firmware upgrade

Target applications

- > Adapters and chargers
- > Battery chargers
- > Wireless charging
- > PC docking

Product collaterals / Online support

[Product family page](#)

Product overview incl. datasheet link

OPN	SP Number	Registerable	MDQ	MQQ	MOQ	Package
CYPD717239BFXQXQLA1	SP006051961	Y	1902	1902	3200	PG-TFLGA-39
CYPD717239BFXQTXUMA1	SP006051965	Y	1902	1902	3000	PG-TFLGA-39
CYPD717339BFXQXQLA1	SP006051952	Y	1902	1902	3200	PG-TFLGA-39
CYPD717339BFXQTXUMA1	SP006051957	Y	1902	1902	3000	PG-TFLGA-39

EZ-USB™ FX20 MIPI to USB solution demo kit
DEMO_FX20_MIPI_001



EZ-USB™ FX20 MIPI to USB solution demo kit consists of four Raspberry Pi camera connectors supporting 4-lane MIPI CSI-2 Rx data and an Efinix Ti180 FPGA connected to FX20 with DDR memory for frame buffering. It allows total of 16 Gbps data streaming in USB3 vision or USB video class standard.

Features

- > Raspberry Pi camera connector
- > 4-lane MIPI CSI-2 support
- > USB-C bus-power
- > UVC / U3V FW support
- > USB FS debug port
- > QSE expansion connector

Benefits

- > Quick USB 20 Gbps evaluation
- > Bus-power for standalone operation
- > Easy configuration flash update via USB
- > Easy debugging with virtual COM

Target applications

- > Machine vision
- > Industrial automation
- > Video frame grabber
- > Mixed reality headset, 3D scanners
- > Test and measurements

Product collaterals / Online support

[Board page](#)

Product overview incl. user manual link

OPN	SP Number
DEMOFX20MIPI001TOBO1	SP006157179