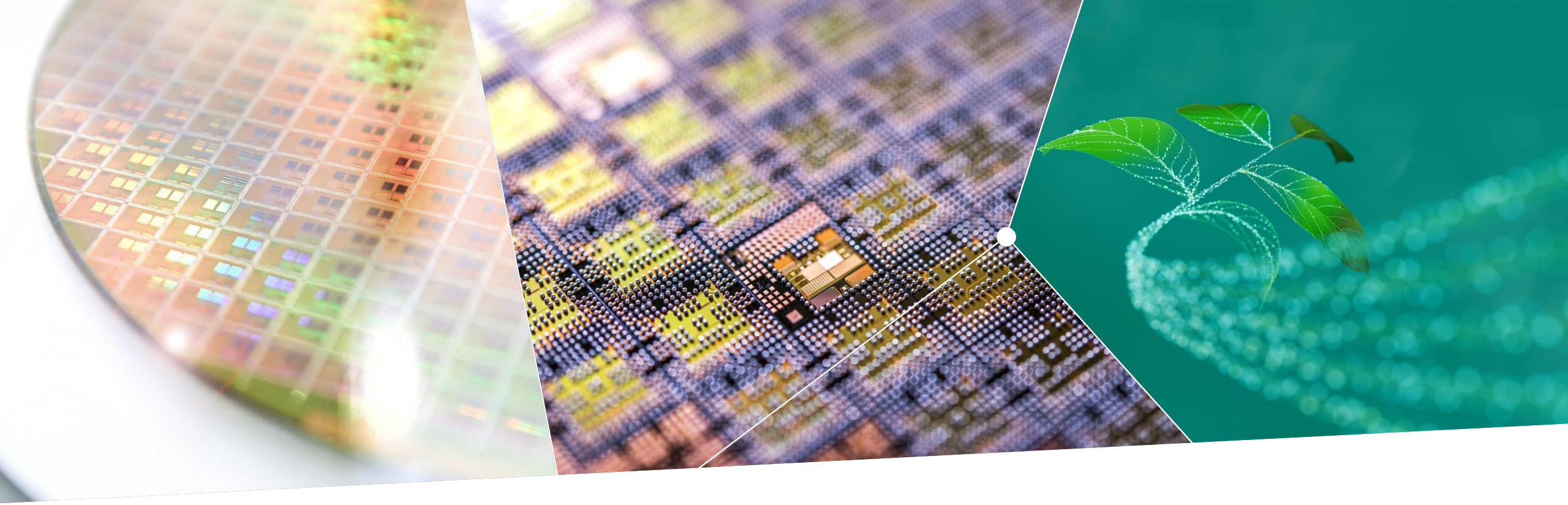

Mapping of OPTIREG™ product portfolio with various microcontrollers

Infineon Automotive Division

H2 2025

Important Notice

Ownership concerns and suggestions

- The ownership of this document lies with ATV SP APS PMG team.
- Please refrain from creating versions of this document, modifying its content or indulging into any kind of editing, instead contact us!
- We are constantly improving this document, therefore if you have any suggestions, feedback, complaints, questions, ideas, etc. please write us an e-mail with subject title „mapping table“ to the address: R-IFX-APSProductMar@infineon.com

How to use this document?

- The aim of this document is to give an overview of the fit between OPTIREG™ products and various microcontrollers. For detailed information please refer to datasheets.
- On the upcoming slide you will find a navigation table, to jump to the slide with information of your interest. Once you are on the slide you can click on the ‚Home‘ icon to return to the navigation table.
- We have classified the quality of fit into various categories. On the slide ‚Legend for Fit Description‘ you will find more information about the fit types and respective description. On individual slides we have also mentioned what type of fit exists for a particular power supply product and microcontroller.

Navigation Table

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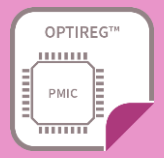
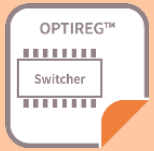
CLICK !

OPTIREG™	Infineon AURIX™			Infineon Traveo™		Infineon	Texas Instruments	NXP	Renesas	ST Micro
	TC2x	TC3x	TC4x	I	II	PSoC®	Piccolo™/ Delfino™	S32K	RH850	SPC5x
	◎	◎	◎	◎	◎	N/A	◎	◎	◎	◎
	◎	◎	N/A	◎	◎	◎	◎	◎	N/A	N/A
	◎	◎	N/A	◎	◎	N/A	◎	◎	N/A	N/A
	◎	◎	N/A	◎	◎	◎	◎	◎	◎	◎

Legend for Fit Description

Symbol	Fit type	Description
	**Best Fit**	Everything fits **perfectly** between the power supply product and respective microcontroller.
	**Fit**	The power supply fits well but may be more suitable for a microcontroller with **higher** power requirements; additional small componets (capacitor, BJT,..) might be needed.
	**Fit with additional components**	Based on voltage requirement of the microcontroller an additional post LDO or a DC-DC may be required (e.g. µC without internal VREG).
	(blank)	No fit

Mapping OPTIREG™ product portfolio with Infineon AURIX™ Microcontrollers

Mapping OPTIREG™ linear with AURIX™ TC2x Microcontroller

Go Home!

Infineon AURIX™ Family		Maximum Power Requirements (real power pattern)	OPTIREG™ linear					
			Ultra Low Quiescent Current			Advanced Feature Set Reset and Watchdog		Post LDO / Core Voltage
			TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLS20x Family
			100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	Use in combination with pre dc-dc
TC2x	TC21 series	88mA @ 3.3V	◎	✓	✓	✓		
	TC22 series	88mA @ 3.3V	◎	✓	✓	✓		
	TC23 series	109mA @ 3.3V		◎	◎	◎		
	TC26 series	186mA @ 3.3V 123mA @ 5V		✓	✓	✓	✓	TLS203x (300mA)
	TC26 series *(ADAS variant)*	203mA @ 3.3V 134mA @ 5V			✓		✓	TLS203x (300mA)
	TC27 series	307mA @ 3.3V 203mA @ 5V			✓		✓	TLS203x (300mA)
	TC29 series	485mA @ 3.3V 320mA @ 5V					✓	TLS205x (500mA)
	TC29 series *(ADAS variant)*	515mA @ 3.3V 340mA @ 5V						

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ switcher with AURIX™ TC2x Microcontroller

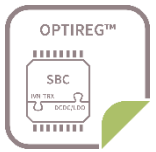
Infineon AURIX™ Family		Maximum Power Dissipation (real power pattern)	OPTIREG™ switcher for Pre-Regulation and Core Voltages					
			12V Pre-Regulator Low Power DC-DC 500mA			12V Pre-Regulator Medium Power Up-to 2.5A		Post LDO / Core Voltage
			TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50	TLS20x Family
			500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)	Use in combination with pre dc-dc
			Reset	Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset	
TC2x	TC21 series	88mA @ 3.3V						
	TC22 series	88mA @ 3.3V						
	TC23 series	109mA @ 3.3V						
	TC26 series	186mA @ 3.3V 123mA @ 5V						
	TC26 series *(ADAS variant)*	203mA @ 3.3V 134mA @ 5V	✓	✓	✓			TLS203x (300mA)
	TC27 series	307mA @ 3.3V 203mA @ 5V	✓	✓	✓			TLS203x (300mA)
	TC29 series	485mA @ 3.3V 320mA @ 5V	✓	✓	✓	✓	✓	TLS203x (300mA)
	TC29 series *(ADAS variant)*	515mA @ 3.3V 340mA @ 5V	✓	✓	✓	✓	✓	TLS203x (300mA)

Best Fit Fit Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ SBC with AURIX™ TC2x Microcontroller



Infineon AURIX™ Family		Maximum Power Dissipation (real power pattern)	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
TC2x	TC21 series	88mA @ 3.3V	Best Fit	Fit	Best Fit		
	TC22 series	88mA @ 3.3V	Best Fit	Fit	Best Fit		
	TC23 series	109mA @ 3.3V	Best Fit	Fit	Best Fit	Fit	Fit
	TC26 series	186mA @ 3.3V 123mA @ 5V		Best Fit	Best Fit	Fit	Fit
	TC26 series *(ADAS variant)*	203mA @ 3.3V 134mA @ 5V		Fit	Best Fit	Fit with additional components	Fit with additional components
	TC27 series	307mA @ 3.3V 203mA @ 5V		Fit		Fit with additional components	Fit with additional components
	TC29 series	485mA @ 3.3V 320mA @ 5V		Fit		Fit with additional components	Fit with additional components
	TC29 series *(ADAS variant)*	515mA @ 3.3V 340mA @ 5V				Fit with additional components	Fit with additional components

Best Fit Fit Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ PMIC with AURIX™ TC2x Microcontroller

Infineon AURIX™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584/5Q*	TLF35584/5Q* w/ TLF11251	TLF30682QV	TLE9243QK	TLF4D985Q
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
TC2x	TC21 series	88mA @ 3.3V					
	TC22 series	88mA @ 3.3V					
	TC23 series	109mA @ 3.3V	✓				✓
	TC26 series	186mA @ 3.3V 123mA @ 5V	✓				✓
	TC26 series *(ADAS variant)*	203mA @ 3.3V 134mA @ 5V	✓				✓
	TC27 series	307mA @ 3.3V 203mA @ 5V	◎			✓	✓
	TC29 series	485mA @ 3.3V 320mA @ 5V	◎			✓	✓
	TC29 series *(ADAS variant)*	515mA @ 3.3V 340mA @ 5V	◎			✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ linear with AURIX™ TC3x Microcontroller

Go Home!

Infineon AURIX™ Family		Maximum Power Requirements (real power pattern)	OPTIREG™ linear					
			Ultra Low Quiescent Current			Advanced Feature Set Reset and Watchdog		Post LDO / Core Voltage
			TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLS20x Family
			100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	Use in combination with pre dc-dc
2nd Gen	TC33 series	200mA @ 3.3V 132mA @ 5V		✓	✓	✓	✓	TLS202x (150mA)
	TC33 series *(ADAS variant)*	381mA @ 3.3V 252mA @ 5V			✓		✓	TLS203x (300mA)
	TC35 series	576mA @ 3.3V 380mA @ 5V						
	TC36 series	333mA @ 3.3V 240mA @ 5V			✓		✓	TLS203x (300mA)
	TC37 series	370mA @ 3.3V 244mA @ 5V					✓	TLS205x (500mA)
	TC38 series	515mA @ 3.3V 340mA @ 5V						
	TC39 series	758mA @ 3.3V 500mA @ 5V						
	TC39 series *(ADAS variant)*	679 mA @ 3.3V (T_J = 125°C) 448 mA @ 5V (T_J = 125°C)						

Best Fit Fit Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ switcher with AURIX™ TC3x Microcontroller

Infineon AURIX™ Family		Maximum Power Dissipation (real power pattern)	OPTIREG™ switcher for Pre-Regulation and Core Voltages					
			12V Pre-Regulator Low Power DC-DC 500mA			12V Pre-Regulator Medium Power Up-to 2.5A		Post LDO / Core Voltage
			TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50	TLS20x Family
			500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)	Use in combination with pre dc-dc
			Reset	Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset	
TC3x	TC33 series	200mA @ 3.3V 132mA @ 5V	✓	✓				TLS203x (300mA)
	TC33 series *(ADAS variant)*	381mA @ 3.3V 252mA @ 5V	✓	✓	✓			TLS203x (300mA)
	TC35 series	576mA @ 3.3V 380mA @ 5V	✓	✓	✓			TLS205x (500mA)
	TC36 series	333mA @ 3.3V 240mA @ 5V	✓	✓	✓			TLS205x (500mA)
	TC37 series	370mA @ 3.3V 244mA @ 5V	✓	✓	✓	✓	✓	TLS203x (300mA)
	TC38 series	515mA @ 3.3V 340mA @ 5V	✓	✓	✓	✓	✓	TLS203x (300mA)
	TC39 series	758mA @ 3.3V 500mA @ 5V				✓	✓	TLS205x (500mA)
	TC39 series *(ADAS variant)*	679 mA @ 3.3V (T_J = 125°C) 448 mA @ 5V (T_J = 125°C)				✓	✓	TLS205x (500mA)

Best Fit Fit Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ SBC with AURIX™ TC3x Microcontroller

Infineon AURIX™ Family		Maximum Power Dissipation (real power pattern)	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
TC3x	TC33 series	200mA @ 3.3V 132mA @ 5V	✓	✓	◎	✓	✓
	TC33 series *(ADAS variant)*	381mA @ 3.3V 252mA @ 5V		✓	◎	✓	✓
	TC35 series	576mA @ 3.3V 380mA @ 5V		✓		✓	✓
	TC36 series	333mA @ 3.3V 240mA @ 5V		✓		✓	✓
	TC37 series	370mA @ 3.3V 244mA @ 5V		✓		✓	✓
	TC38 series	515mA @ 3.3V 340mA @ 5V		✓		✓	✓
	TC39 series	758mA @ 3.3V 500mA @ 5V				✓	✓
	TC39 series *(ADAS variant)*	679 mA @ 3.3V (T_J = 125°C) 448 mA @ 5V (T_J = 125°C)					

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ PMIC with AURIX™ TC3x Microcontroller

Go Home!

Infineon AURIX™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584/5Q*	TLF35584/5Q* w/ TLF11251	TLF30682QV	TLE9243QK	TLF4D985QK
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
TC3x	TC33 series	200mA @ 3.3V 132mA @ 5V	✓		✓		✓
	TC33 series *(ADAS variant)*	381mA @ 3.3V 252mA @ 5V	◎		◎	✓	◎
	TC35 series	576mA @ 3.3V 380mA @ 5V	◎		✓	✓	◎
	TC36 series	333mA @ 3.3V 240mA @ 5V	◎	✓	◎	✓	◎
	TC37 series	370mA @ 3.3V 244mA @ 5V	◎	✓	◎	✓	◎
	TC38 series	515mA @ 3.3V 340mA @ 5V	◎	◎	✓	✓	◎
	TC39 series	758mA @ 3.3V 500mA @ 5V	✓	◎	✓	✓	✓
	TC39 series *(ADAS variant)*	679 mA @ 3.3V (T_J = 125°C) 448 mA @ 5V (T_J = 125°C)	✓	◎	✓	✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ PMIC with AURIX™ TC4x Microcontroller

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Infineon AURIX™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584/5Q*	TLF35584/5Q* w/ TLF11251	TLF30682QV	TLE9243QK	TLF4D985QK
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
TC4x	TC4D series	160mA @ 5V/3.3V 40mA @ 3.3V/1.8V 5000mA @ 1.0V					

Best Fit Fit Fit with additional components

Note:Based on **Maximum Power Dissipation** (at real power pattern) see datasheet parameter PD SR (T_J = 150°C);
Current Value = Power Dissipation / Voltage Level;

Further support and calculation tools under
www.infineon.com/OPTIREG™ and www.infineon.com/AURIX™

Mapping OPTIREG™ product portfolio with Infineon Traveo™ Microcontrollers

Mapping OPTIREG™ linear with Traveo™ Microcontroller

Go Home!

Traveo™ Family		Maximum Power Supply Current	OPTIREG™ linear					
			Ultra Low Quiescent Current			Advanced Feature Set Reset and Watchdog		Post LDO / Core Voltage
			TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLS20x Family
			100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	Use in combination with pre dc-dc
1st Gen	S6J311A/9 series	5V / 200mA (T_A = -40°C to +125°C)		Best Fit	Best Fit	Best Fit	Best Fit	
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)			Best Fit		Best Fit	
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)			Best Fit		Best Fit	
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)		Best Fit	Best Fit	Best Fit	Fit	
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)		Best Fit	Fit	Best Fit	Fit	
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)		Best Fit	Fit	Best Fit	Fit	
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)		Best Fit	Fit	Best Fit	Fit	

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ switcher with Traveo™ Microcontroller

Traveo™ Family		Maximum Power Supply Current	OPTIREG™ switcher for Pre-Regulation and Core Voltages				
			12V Pre-Regulator Low Power DC-DC 500mA			12V Pre-Regulator Medium Power Up-to 2.5A	
			TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			Reset	Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset
1st Gen	S6J311A/9 series	5V / 200mA (T_A = -40°C to +125°C)	◎	◎	◎		
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)	◎	◎	◎	✓	✓
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)	◎	◎	◎	✓	✓
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)	✓	✓	✓		
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)	✓	✓	✓		
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)	✓	✓	✓		
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)	✓	✓	✓		

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ SBC with Traveo™ Microcontroller

Traveo™ Family		Maximum Power Supply Current	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
1st Gen	S6J311A/9 series	5V / 200mA (T_A = -40°C to +125°C)		Best Fit	Best Fit		
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)		Best Fit		Fit	Fit
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)		Best Fit	Best Fit	Fit	Fit
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)		Fit	Best Fit		
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)	Best Fit	Fit	Best Fit		
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)	Best Fit	Fit	Best Fit		
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)	Best Fit	Fit	Best Fit		

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ PMIC with Traveo™ Microcontroller

Traveo™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
1st Gen	S6J311A/9 series	5V / 200mA (T_A = -40°C to +125°C)					
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)	Best Fit	Best Fit		Best Fit	Best Fit
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)	Fit	Fit		Fit	Fit
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)	Fit	Fit		Fit	Fit
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)	Fit	Fit		Fit	Fit
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)	Fit	Fit		Fit	Fit
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)	Fit	Fit		Fit	Fit

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ Linear/Switcher with Traveo™ II Microcontroller

Go Home!

TRAVEO™ T2G Family		Core #	Current consumption Max. as per datasheet Max. clock speed All peripherals enabled No I/O toggling T_A = 105°C	Current consumption Scenario with lower performance at T_A = 85°C Max. as per estimation sheet Note: Flash writing not considered	I_{rush} C_{S1} *	External core supply and supply concept	OPTIREG™ Linear				OPTIREG™ Switcher		OPTIREG™
							Ultra Low Quiescent Current		Advanced Feature Set Reset and Watchdog		12V Pre-Regulator Medium Power with enable + reset		Core Voltage
							TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLS4120D0x	TLS4125D0x	
							200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	2000mA (3.3V)	2500mA (5V)	1.15V
Body entry	**T2G-BE-512K** CYT2B6	Single	I_{DDD} = 85mA @3.3V / 5V	I_{DDD} = 45mA I_{IO} = 4mA Door ECU	375mA 9.4µF	No ①	✓	◎	✓	◎	✓	✓	
	T2G-BE-1M CYT2B7		I_{DDD} = 102mA @3.3V / 5V										
	T2G-BE-2M CYT2B9		I_{DDD} = 110mA @3.3V / 5V										
	T2G-BE-4M CYT2BL		I_{DDD} = 127mA @ 3.3V / 5V										
Cluster entry	**T2G-CE-4M** CYT2CL		I_{DDD} = 140mA @ 3.3V / 5V	I_{DDD} = 52mA I_{IO} = 4mA Cluster entry			✓	◎	✓	◎	✓	✓	
Body high	**T2G-BH-4M** CYT3BB	Single	I_{CCD}= 240mA @ 1.15V	I_{CCD} = 110mA I_{DDD} = 12mA I_{IO} = 2mA Cluster ECU	850mA 20µF	Yes ① ②③				✓	✓	✓	*Post LDO* TLS208 800mA
	T2G-BH-4M CYT4BB	Dual	I_{CCD} = 287mA @ 1.15V										
	T2G-BH-8M CYT4BF		I_{CCD} = 543mA @ 1.15V	I_{CCD} = 320mA		Yes ②③				✓	✓	✓	*Post LDO* TLS208 800mA
	T2G-BH-16M CYT6BJ	Quad	I_{CCD} = 800mA @ 1.15V			Yes ③							

◎ **Best Fit** ✓ **Fit** ✓ **Fit with additional components**

①②③ Supply concept like defined in further slides

Note: * In-rush current through internal regulator to charge capacitor C_{S1} on core supply rail initially. Value for C_{S1} is a typical value. May differ due to application needs

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ SBC with Traveo™ II Microcontroller

Go Home!

TRAVEO™ T2G Family		Core #	Current consumption Max. as per datasheet Max. clock speed All peripherals enabled No I/O toggling T_A = 105°C	Current consumption Scenario with lower performance at T_A = 85°C Max. as per estimation sheet Note: Flash writing not considered	I_{rush} C_{S1} *	External core supply and supply concept	System Basis Chip (SBC)					OPTIREG™
							Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC	Core supply
							TLE9461(-3) ES	TLE9471(-3) ES	TLE926x(-3) BQX	TLE927xQX	TLE9278(-3) BQX	
							150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)	1.15V
Body entry	**T2G-BE-512K** CYT2B6	Single	I_{DDD} = 85mA @3.3V / 5V	I_{DDD} = 45mA I_{IO} = 4mA Door ECU	375mA 9.4µF	No ①	🎯	🎯	🎯	✅	✅	
	T2G-BE-1M CYT2B7		I_{DDD} = 102mA @3.3V / 5V									
	T2G-BE-2M CYT2B9		I_{DDD} = 110mA @3.3V / 5V									
	T2G-BE-4M CYT2BL		I_{DDD} = 127mA @ 3.3V / 5V									
Cluster entry	**T2G-CE-4M** CYT2CL		I_{DDD} = 140mA @ 3.3V / 5V	I_{DDD} = 52mA I_{IO} = 4mA Cluster entry			🎯	🎯	🎯	✅	✅	
Body high	**T2G-BH-4M** CYT3BB	Single	I_{CCD}= 240mA @ 1.15V	I_{CCD} = 110mA I_{DDD} = 12mA I_{IO} = 2mA Cluster ECU	850mA 20µF	Yes ① ②③		✅	✅	✅	✅	*Post LDO* TLS208 800mA
	T2G-BH-4M CYT4BB	Dual	I_{CCD} = 287mA @ 1.15V									
	T2G-BH-8M CYT4BF	Dual	I_{CCD} = 543mA @ 1.15V	I_{CCD} = 320mA		Yes ②③						
	T2G-BH-16M CYT6BJ	Quad	I_{CCD} = 800mA @ 1.15V	Tbd		Yes ③						

🎯 **Best Fit** ✅ **Fit** ✅ **Fit with additional components**

①②③ Supply concept like defined in further slides

Note: * In-rush current through internal regulator to charge capacitor C_{S1} on core supply rail initially. Value for C_{S1} is a typical value. May differ due to application needs

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ PMIC with Traveo™ II Microcontroller

Traveo™ II Family		Maximum Current Consumption	Need of external core supply	OPTIREG™ PMIC				
				ISO 26262 compliant 48V	ISO 26262 compliant 48V		ISO 26262 compliant	ISO 26262 compliant
				TLF35584QV/QK	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
				600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
Body entry	**TVII-BE-512K** CYT2B6 **TVII-BE-1M** CYT2B7	I_{DDD} = 102mA @3.3V / 5V I_{IO} = 50mA @ 3.3V / 5V	No			✓		
	TVII-BE-2M CYT2B9 **TVII-B-E-4M** CYT2BL	I_{DDD} = = 110mA @3.3V / 5V I_{IO} = 50mA @ 3.3V / 5V	No			✓		
Body high	**TVII-BH-4M** CYT3BB **TVII-BH-4M** CYT4BB	I_{CCD} = 287mA @ 1.15V I_{IO} = 50mA @ 3.3V / 5V	Yes	✓	✓	✓		✓
	TVII-BH-8M CYT4BF	I_{CCD} = 543mA @ 1.15V I_{IO} = 50mA @ 3.3V / 5V	Yes	✓	✓	✓		✓
	TVII-BH-16 CYT6BJ	I_{CCD} = 800mA @ 1.15V I_{IO} = 50mA @ 3.3V / 5V	Yes	✓	✓	✓		✓

Note: For **48V** application please refer to 48V slides.

✓ **Best Fit** ✓ **Fit** ✓ **Fit with additional components**

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ PMIC with Traveo™ II Microcontroller

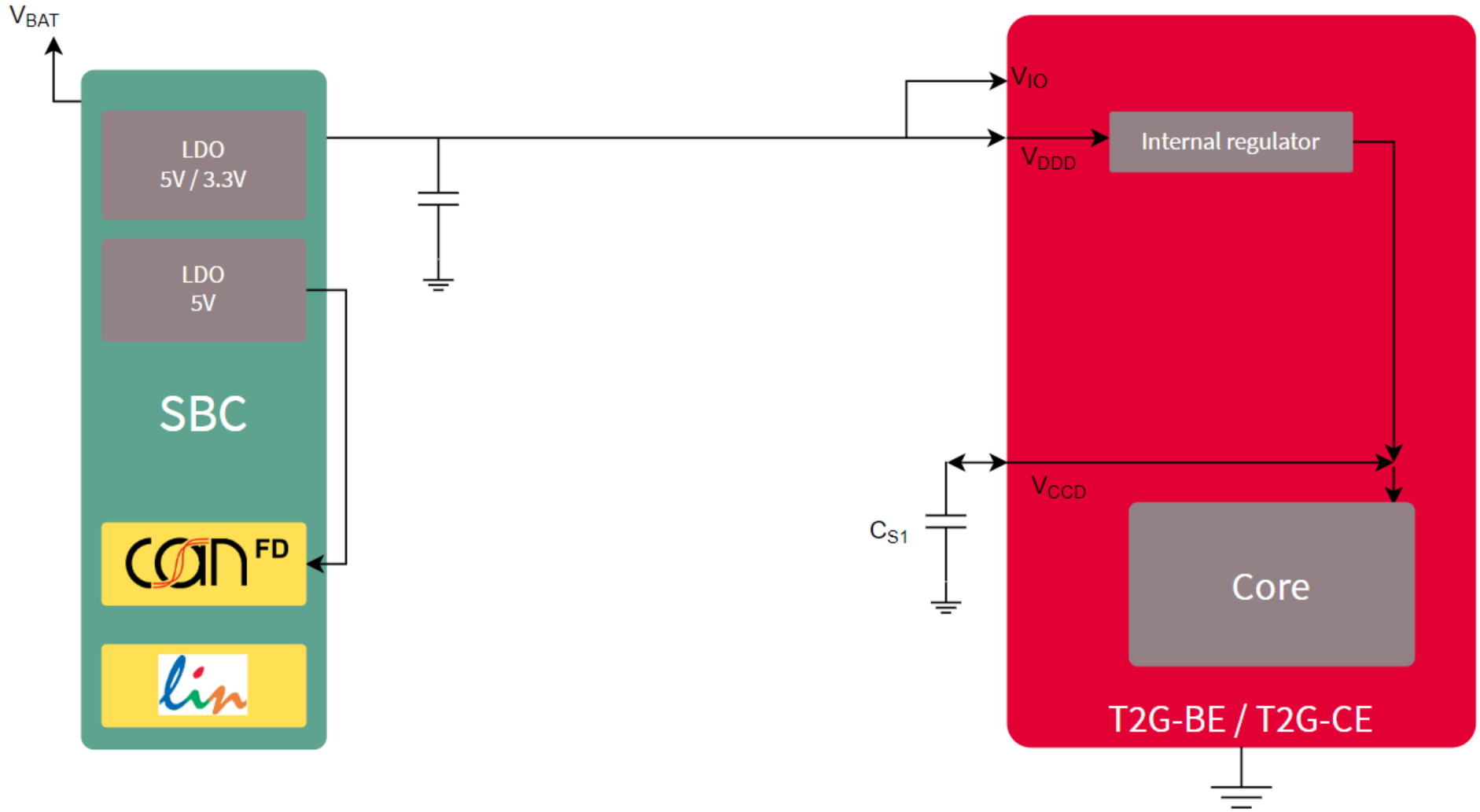
Traveo™ II Family		Maximum Current Consumption	Need of external core supply	OPTIREG™ PMIC				
				ISO 26262 compliant 48V	ISO 26262 compliant 48V		ISO 26262 compliant	ISO 26262 compliant
				TLF35584QV/QK	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
				600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
Cluster entry	**TVII-CE-4M** CYT2CL	**I_{DDD} = 140mA @3.3V / 5V I_{IO} = 50mA@ 3.3V**	**No**			✓		
Cluster	**TVII-C-2D-4M** CYT3DL	**I_{CCD} = 950mA @ 1.15V I_{IO} = 50mA@ 3.3V / 5V**	**Yes**	✓	✓	✓		✓
	TVII-C-2D-6M CYT4DN	**I_{CCD} = 1120mA @ 1.15V I_{IO} = 50mA @ 3.3V / 5V**	**Yes**	✓	✓	✓		✓

Note: For **48V** application please refer to 48V slides.

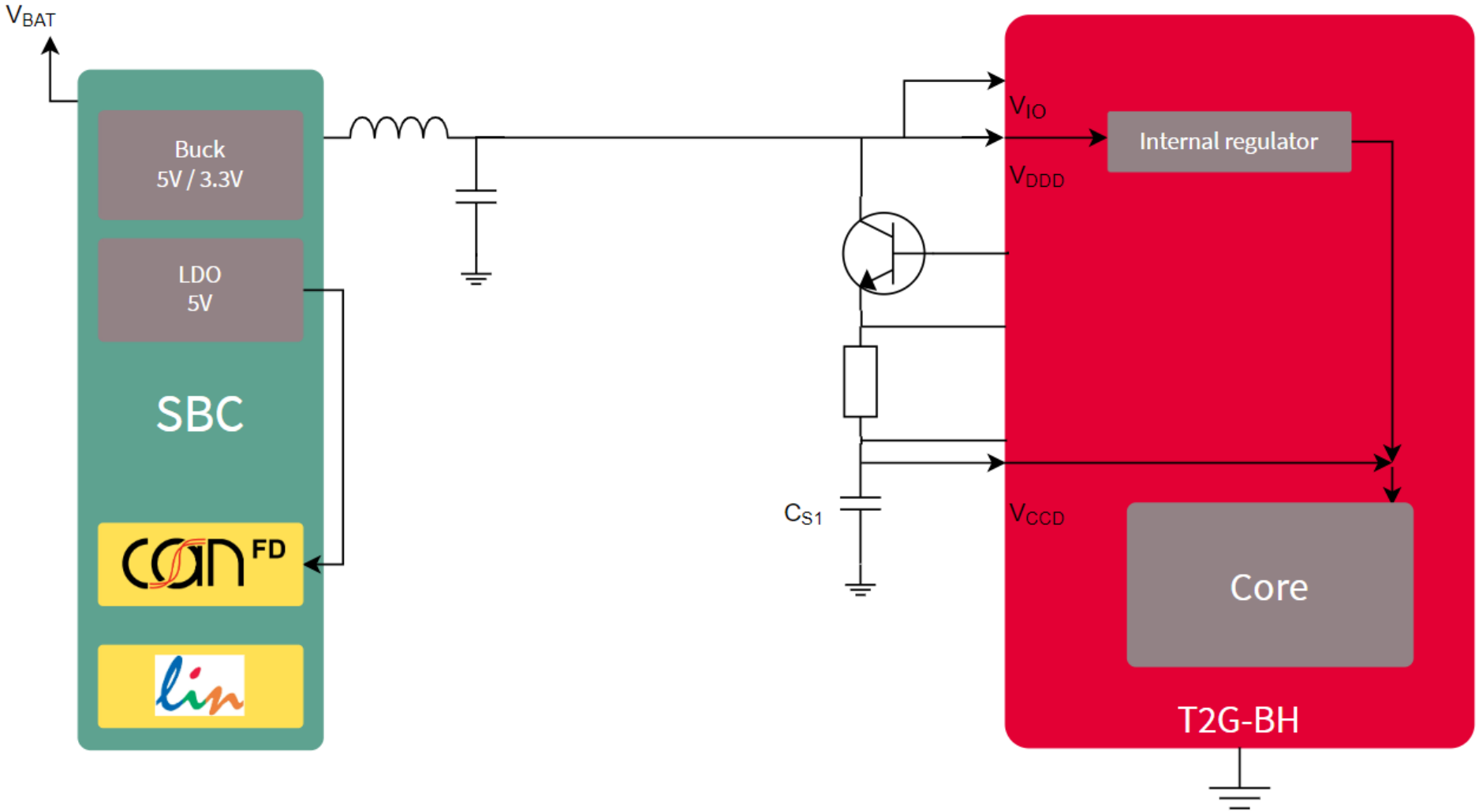
Best Fit **Fit** **Fit with additional components**

Further support and calculation tools under www.infineon.com/OPTIREG™

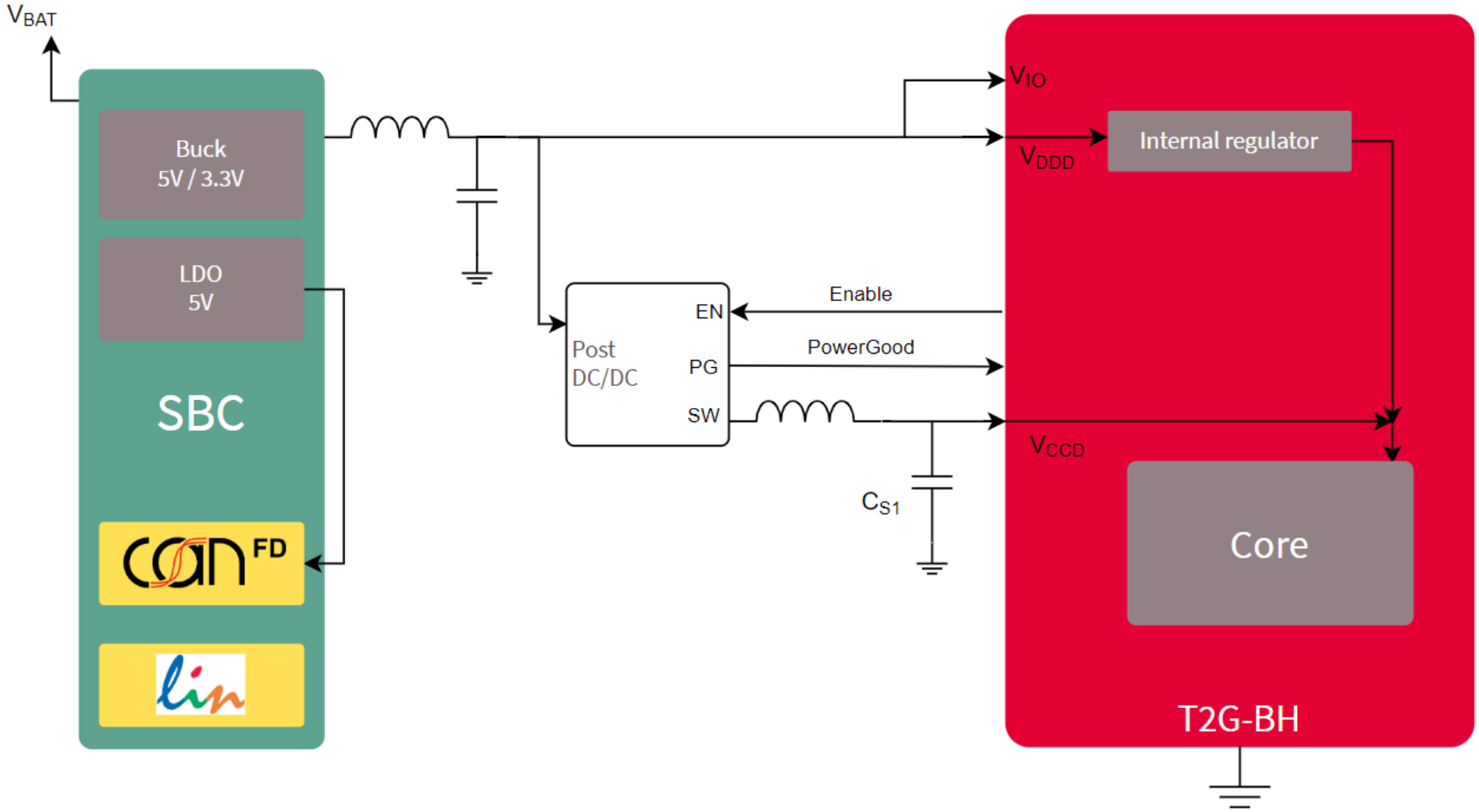
①: Supply concept example with internal core supply



②: Supply concept example with external pass transistor



③: Supply concept example with external core supply



Mapping OPTIREG™ linear & SBC with Infineon PSoC® 4 Microcontrollers

Mapping OPTIREG™ linear & SBC with PSoC® 4 Microcontrollers

Go Home!

Cypress PSoC® 4 Family	Typical current consomption	Count of CAN controller	Internal LowVoltage-Detection *	LIN LDO	OPTIREG™ linear						OPTIREG™ SBC	
					Ultra Low Quiescent Current				Advanced Feature Set Reset and Watchdog		Lite LDO SBC	MR+ SBC
				TLE8457x	TLS805xxx	TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLE9461(-3)ES	TLE926x(-3)BQX
				70mA (5V/3.3V) 1 LIN	50mA (5V/3.3V)	100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	150mA (5V/3.3V) 1 CAN	≥250mA (5V/3.3V) 1 CAN 0 - 2 LIN
PSoC 4000(S)	1.8 V < V_{CC} < 5.5 V I_{CC} = ~30 mA	0	no	◎	◎	◎	✓	✓	✓		◎	✓
PSoC 4100 / PSoC 4100S			Yes / no	◎	◎	◎	✓	✓	✓		◎	✓
PSoC 4100S Plus		1 CAN	no	✓	✓	✓	✓				◎	◎
PSoC 4 M Series 4100M		2 CAN	yes								◎	◎
PSoC 4100S Max		1 CAN-FD	no								◎	◎

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note: At PSoC® devices without internal LowVoltageDetection the application may require a supply variant with reset output

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ product portfolio with Texas Instruments Piccolo™/ Delfino™ Microcontrollers

Mapping OPTIREG™ linear with TI Piccolo™/Delfino™ Microcontroller

Texas Instrument C2000™ Family		Power Consumption	OPTIREG™ linear				
			Ultra Low Quiescent Current			Advanced Feature Set Reset and Watchdog	
			TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx
			100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)
Piccolo™ generation	TMS320F28004x series	143mA@ 3.3V		◎	◎	◎	✓
	TMS320F2802x series	98mA@ 3.3V	◎	◎	✓	◎	✓
	TMS320F2802x series	153mA@ 3.3V		◎	◎	◎	✓
	TMS320F2805x series	192mA@ 3.3V		◎	◎	◎	✓
	TMS320F2806x series	307mA@ 3.3V			✓		◎
	TMS320F2807x series	405mA@ 3.3V					◎
Delfino™ generation*	TMS320F2833x series*	92mA @ 3.3V 350mA @ 1.8V	✓	✓		✓	✓
	TMS320F2834x series*	80mA @ 3.3V 45mA @ 1.8V 740mA @ 1.2V					
	TMS320F2837xD series*	90mA @ 3.3V 495mA @ 1.8V	✓	✓		✓	✓
	TMS320F2837xD series*	90mA @ 3.3V 400mA @ 1.2V	✓	✓		✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

*Based on **Power Consumption Operational (flash) max.**, see datasheet parameter I_{DDIO} + I_{DDA} (+I_{DD3VFL} + I_{DDA33}) if VREG enabled (T_J = -40°C to 125°C), V_{IN} (3.3 V)

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ switcher with TI Piccolo™/Delfino™ Microcontroller

Go Home!

Texas Instrument C2000™ Family		Power Consumption	OPTIREG™ switcher for Pre-Regulation and Core Voltages			
			12V Pre-Regulator Low Power DC-DC 500mA		12V Pre-Regulator Medium Power Up-to 2.5A	
			TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset
Piccolo™ generation	TMS320F28004x series	143mA@ 3.3V				
	TMS320F2802x series	98mA@ 3.3V				
	TMS320F2802x series	153mA@ 3.3V				
	TMS320F2805x series	192mA@ 3.3V				
	TMS320F2806x series	307mA@ 3.3V				
	TMS320F2807x series	405mA@ 3.3V			✓	
Delfino™ generation*	TMS320F2833x series*	92mA @ 3.3V 350mA @ 1.8V			✓	
	TMS320F2834x series*	80mA @ 3.3V 45mA @ 1.8V 740mA @ 1.2V				
	TMS320F2837xD series*	90mA @ 3.3V 495mA @ 1.8V			✓	
	TMS320F2837xD series*	90mA @ 3.3V 400mA @ 1.2V			✓	

Best Fit ✓ Fit ✓ Fit with additional components

*Based on **Power Consumption Operational (flash) max.**, see datasheet parameter I_{DDIO} + I_{DDA} (+I_{DD3VFL} + I_{DDA33}) if VREG enabled (T_J = -40°C to 125°C), V_{IN} (3.3 V)

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ SBC with TI Piccolo™/Delfino™ Microcontroller

Go Home!

Texas Instrument C2000™ Family		Power Consumption	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
Piccolo™ generation	TMS320F28004x series	143mA@ 3.3V	◎	◎	◎		
	TMS320F2802x series	98mA@ 3.3V	◎	✓	✓		
	TMS320F2802x series	153mA@ 3.3V	✓	◎	◎		
	TMS320F2805x series	192mA@ 3.3V		◎	◎		
	TMS320F2806x series	307mA@ 3.3V		◎		✓	✓
	TMS320F2807x series	405mA@ 3.3V		◎		✓	✓
Delfino™ generation*	TMS320F2833x series*	92mA @ 3.3V 350mA @ 1.8V	✓	✓	✓	✓	✓
	TMS320F2834x series*	80mA @ 3.3V 45mA @ 1.8V 740mA @ 1.2V					
	TMS320F2837xD series*	90mA @ 3.3V 495mA @ 1.8V	✓	✓	✓	✓	✓
	TMS320F2837xD series*	90mA @ 3.3V 400mA @ 1.2V	✓	✓	✓	✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

*Based on **Power Consumption Operational (flash) max.**, see datasheet parameter I_{DDIO} + I_{DDA} (+I_{DD3VFL} + I_{DDA33}) if VREG enabled (T_J = -40°C to 125°C), V_{IN} (3.3 V)

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ PMIC with TI Piccolo™/Delfino™ Microcontroller

Texas Instrument C2000™ Family		Maximum Current Consumption	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584QV/QK	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
Piccolo™ generation	TMS320F28004x series	143mA@ 3.3V					
	TMS320F2802x series	98mA@ 3.3V					
	TMS320F2802x series	153mA@ 3.3V					
	TMS320F2805x series	192mA@ 3.3V					
	TMS320F2806x series	307mA@ 3.3V	◎	◎			
	TMS320F2807x series	405mA@ 3.3V	◎	◎		✓	
Delfino™ generation*	TMS320F2833x series*	92mA @ 3.3V 350mA @ 1.8V	✓	✓	✓	✓	✓
	TMS320F2834x series*	80mA @ 3.3V 45mA @ 1.8V 740mA @ 1.2V	✓	✓	✓	✓	✓
	TMS320F2837xD series*	90mA @ 3.3V 495mA @ 1.8V	✓	✓	✓	✓	✓
	TMS320F2837xD series*	90mA @ 3.3V 400mA @ 1.2V	✓	✓	✓	✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

*Device without internal VREG. Infineon's SBC can only be used to supply 3.3V (I_{DDIO} + I_{DD3VFL} + I_{DDA33}) from Vcc1 to as well as the 5V on Vcc2 to supply the CAN transceiver or off-board supply, e.g. for sensor. The core supply I_{DD} and I_{DDA18} needs to come from a seperate source.

Based on **Power Consumption Operational (flash) max.**, see datasheet parameter I_{DDIO} + I_{DDA} (+I_{DD3VFL} + I_{DDA33}) if VREG enabled (T_J = -40°C to 125°C), V_{IN} (3.3 V)

*Based on **Power Consumption Operational (flash) max.**, see datasheet parameter I_{DDIO} + I_{DDA} (+I_{DD3VFL} + I_{DDA33}) if VREG enabled (T_J = -40°C to 125°C), V_{IN} (3.3 V)

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ product portfolio with NXP S32K Microcontrollers

Mapping OPTIREG™ linear with NXP S32K Microcontroller

Go Home!

NXP S32K1xx Family		Maximum Power Consumption	OPTIREG™ linear					
			Ultra Low Quiescent Current			Advanced Feature Set Reset and Watchdog		Post LDO / Core Voltage
			TLS810xxx	TLS820xxx	TLS835xxx	TLS820Fx	TLS850Fx	TLS20x Family
			100mA (5V/3.3V)	200mA (5V/3.3V)	350mA (5V/3.3V)	200mA (5V/3.3V)	500mA (5V/3.3V)	Use in combination with pre dc-dc
S32K	S32K116[1]	24.1mA @ 5V	Best Fit					
	S32K118[1]	25.9mA @ 5V	Best Fit					
	S32K142[2]	57.4mA @ 5V	Best Fit	Fit		Fit		
	S32K144[2]	61.3mA @ 5V	Best Fit	Fit		Fit		
	S32K146[2]	82.8mA @ 5V	Best Fit	Best Fit	Fit	Best Fit		
	S32K148[2]	97.4mA @ 5V 119mA @ 3.3V			Fit with additional components		Fit with additional components	TLS203x (300mA)

[1] Max. 48 MHz @ T_A = 125°C

[2] Max. 112 MHz @ T_A = 105°C

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ switcher with NXP S32K Microcontroller

NXP S32K1xx Family		Maximum Power Consumption	OPTIREG™ switcher for Pre-Regulation and Core Voltages		
			12V Pre-Regulator Low Power DC-DC 500mA		Post LDO / Core Voltage
			TLF50251	TLF50281	TLS20x Family
			500mA (5V)	500mA (5V)	Use in combination with pre dc-dc
			Enable & Reset	Enable, Reset & Watchdog	
S32K	S32K116[1]	24.1mA @ 5V			
	S32K118[1]	25.9mA @ 5V			
	S32K142[2]	57.4mA @ 5V			
	S32K144[2]	61.3mA @ 5V			
	S32K146[2]	82.8mA @ 5V			
	S32K148[2]	97.4mA @ 5V 119mA @ 3.3V	✓	✓	TLS203x (300mA)

[1] Max. 48 MHz @ T_A = 125°C
[2] Max. 112 MHz @ T_A = 105°C

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ SBC with NXP S32K Microcontroller

NXP S32K1xx Family		Maximum Power Consumption	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
S32K	S32K116[1]	24.1mA @ 5V	◎				
	S32K118[1]	25.9mA @ 5V	◎				
	S32K142[2]	57.4mA @ 5V	◎				
	S32K144[2]	61.3mA @ 5V	◎		✓		
	S32K146[2]	82.8mA @ 5V	◎		✓		
	S32K148[2]	97.4mA @ 5V 119mA @ 3.3V	✓	✓	✓		

[1] Max. 48 MHz @ T_A = 125°C

[2] Max. 112 MHz @ T_A = 105°C

◎ Best Fit ✓ Fit ✓ Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

Further support and calculation tools under www.infineon.com/OPTIREG™

Mapping OPTIREG™ PMIC with NXP S32K Microcontroller

Go Home!

NXP S32K1xx Family		Maximum Current Consumption	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584QV/QK / QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
S32K	S32K116[1]	24.1mA @ 5V					✓
	S32K118[1]	25.9mA @ 5V					✓
	S32K142[2]	57.4mA @ 5V					✓
	S32K144[2]	61.3mA @ 5V					✓
	S32K146[2]	82.8mA @ 5V					✓
	S32K148[2]	97.4mA @ 5V 119mA @ 3.3V					✓

[1] Max. 48 MHz @ T_A = 125°C
[2] Max. 112 MHz @ T_A = 105°C

Best Fit Fit Fit with additional components

Note: Based on **Power Supply Current Flash max.**, see datasheet parameter I_{CC5}

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Mapping OPTIREG™ PMICs & SBCs with Renesas RH850 Microcontrollers

Mapping OPTIREG™ PMIC with Renesas RH850 Microcontroller

RH850 Family		Maximum Power dissipation	OPTIREG™ PMIC				
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
			TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985x
			600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
C Series	RH850/C1M-Ax	730mA @ 1.25V 112mA @ 3.3V/5V			◎	✓	
E Series	RH850/E1L	260mA @ 1.1V (NN) 53mA @ 3.3V/5V	✓	✓	✓	✓	✓
	RH850/E2H	1300mA @ 1.1V 152mA @ 3.3V/5V			✓		◎
	RH850/E2M	1500mA @ 1.1V 154mA @ 3.3V/5V			✓		◎
	RH850/E2UH	1700mA @ 1.1V 156mA @ 3.3V/5V					◎
F Series	RH850/F1K	96mA @ 3.3V/5V					
	RH850/F1H-D8	350mA tot @ 3.3V/5V (REG1VCC 290mA @ 3.3V)	◎	◎		✓	◎
	RH850/F1KM-S1	82mA @ 3.3V/5V					
	RH850/F1KM-S4	205mA @ 3.3V/5V	✓	✓			✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

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Mapping OPTIREG™ SBC with Renesas RH850 Microcontroller

Go Home!

Renesas RH850 Family		Power Consumption	OPTIREG™ SBC				
			Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
			TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
			150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
C Series	RH850/C1M-Ax	730mA @ 1.25V 112mA @ 3.3V/5V				✓	✓
E Series	RH850/E1L	260mA @ 1.1V (NN) 53mA @ 3.3V/5V	✓	✓	✓		
	RH850/E2H	1300mA @ 1.1V 152mA @ 3.3V/5V					
	RH850/E2M	1500mA @ 1.1V 154mA @ 3.3V/5V					
	RH850/E2UH	1700mA @ 1.1V 156mA @ 3.3V/5V					
F Series	RH850/F1K	96mA @ 3.3V/5V	◎		✓		
	RH850/F1KH-D8	350mA tot @ 3.3V/5V (REG1VCC 290mA @ 3.3V)		◎		✓	✓
	RH850/F1KM-S1	82mA @ 3.3V/5V	◎		✓		
	RH850/F1KM-S4	205mA @ 3.3V/5V		◎	◎	✓	✓

◎ Best Fit ✓ Fit ✓ Fit with additional components

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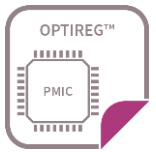
Mapping OPTIREG™ PMICs & SBCs with ST SPC5x Microcontrollers

Mapping OPTIREG™ PMIC with ST SPC5x Microcontroller



ST SPC5x Family	Maximum Power dissipation	OPTIREG™ PMIC				
		ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	ISO 26262 compliant
		TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK	TLF4D985QK
		600mA (5V/3.3V)	600mA (5V/3.3V)	3.5A (3.3V), 2A (1.25V), 0.25A (5V)	800mA (5V)	600mA (5V/3.3V)
SPC584C70E3	711mA @ 3.3V/5V			✓	✓	
SPC584B60E1	390mA @ 3.3V/5V	◎	◎	✓	✓	◎
SPC58NH92C3	1800mA @ 3.3V/5V			✓		
SPC560B64L7	386mA @ 3.3V/5V	◎	◎	✓	✓	◎
SPC56EL70L5	460mA @ 3.3V	◎	◎	✓	✓	◎
SPC564A80B4	546mA @ 5V	◎	◎	✓	◎	◎

◎ Best Fit ✓ Fit ✓ Fit with additional components

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Mapping OPTIREG™ SBC with ST SPC5x Microcontroller

ST SPC5x Family	Power Consumption	OPTIREG™ SBC				
		Lite LDO SBC	Lite DCDC SBC	MR+ SBC	DCDC SBC	MCP+ SBC
		TLE946x(-3)ES	TLE947x(-3)ES	TLE926x(-3)BQX	TLE927xQX	TLE9278(-3)BQX
		150mA (5V/3.3V)	500mA (5V/3.3V)	≥250mA (5V/3.3V)	750mA (5V/3.3V)	750mA (5V/3.3V)
SPC584C70E3	711mA @ 3.3V/5V				🎯	
SPC584B60E1	390mA @ 3.3V/5V		🎯		🎯	🎯
SPC58NH92C3	1800mA @ 3.3V/5V					
SPC560B64L7	386mA @ 3.3V/5V		🎯		🎯	🎯
SPC56EL70L5	460mA @ 3.3V		🎯		🎯	🎯
SPC564A80B4	546mA @ 5V				🎯	🎯

🎯 Best Fit ✔ Fit ✔ Fit with additional components

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