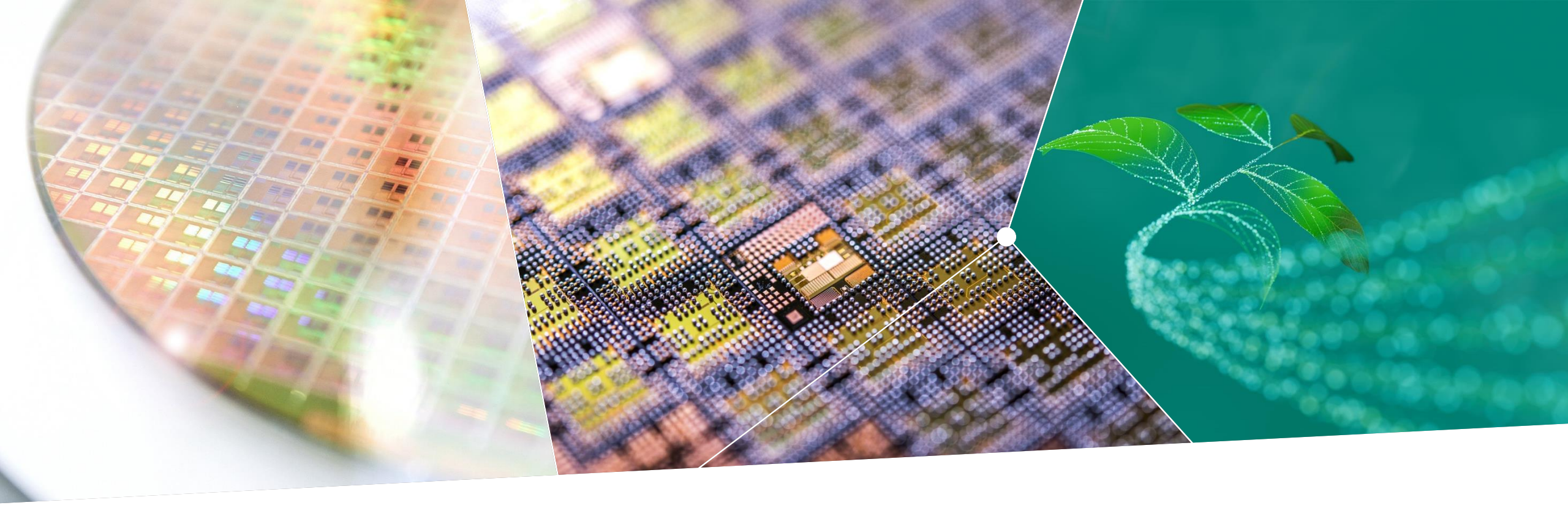

Mapping of OPTIREG™ product portfolio with various microcontrollers

2023

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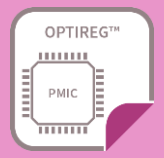
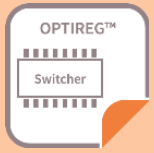
OPTIREG™	Infineon AURIX™ TC2x	Infineon AURIX™ TC3x	Infineon Traveo™ I	Infineon Traveo™ II	Infineon PSoC®	Texas Instruments Piccolo™/ Delfino™	NXP S32K	Renesas RH850	ST Micro SPC5x
					N/A				
								N/A	N/A
					N/A			N/A	N/A
									

Legend for Fit Description

Symbol	Fit type	Description
	**Best Fit**	Everything fits perfectly between the power supply product and respective microcontroller.
	**Best Fit (Oversized)**	The power supply fits well but may be more suitable for a microcontroller with higher power requirements.
	**Good Fit A**	Based on voltage requirement of the microcontroller an additional post LDO or a DC-DC may be required (Device without internal VREG).
	**Good Fit B**	Supply feasibility may depend on the use case of microcontroller.
	**Good Fit C**	In case of LDOs high current might lead to limited thermal budget.
	**Good Fit D**	Supply feasible in combination with load sharing on VCC3 / Additional V_{DDD} cap needed for buffering in-rush current

– Note: For good fits, there is a fit between the OPTIREG™ product and the respective microcontroller, but there might exist some condition or suggestion for a better 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
1st Gen	TC21 series	88mA @ 3.3V	◎	◎	◎	◎	◎	TLS202x (150mA)
	TC22 series	88mA @ 3.3V	◎	◎	◎	◎	◎	TLS202x (150mA)
	TC23 series	109mA @ 3.3V		◎	◎	◎	◎	TLS202x (150mA)
	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			✓		✓	TLS205x (500mA) TLS208x (800mA)

◎ Best Fit

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Good Fit C** (High current might lead to limited thermal budget on LDO)

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	
			TLF50201	TLF50211	TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			-	Enable	Reset	Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset
1st Gen	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

✓ **Good Fit A** (For 3.3V in combination with a post LDO)

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)
1st Gen	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

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Good Fit D** (Supply feasible in combination with load sharing on VCC3)

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

Go Home!

Infineon AURIX™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584/5Q*	TLF35584/5Q* w/ TLF11251	TLF30682QV	TLE9243QK
1nd Gen	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

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Best Fit (Oversized)**

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			✓		✓	TLS202x (150mA)
	TC35 series	576mA @ 3.3V 380mA @ 5V			✓		✓	TLS202x (150mA)
	TC36 series	333mA @ 3.3V 240mA @ 5V			✓		✓	TLS203x (300mA)
	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) TLS208x (800mA)

◎ Best Fit

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

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	
			TLF50201	TLF50211	TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			-	Enable	Reset	Enable & Reset	Enable, Reset & Watchdog	Enable + Reset	Enable + Reset
2nd Gen	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

✓ **Good Fit A** (For 3.3V in combination with a post LDO)

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

Go Home!

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)
2nd Gen	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

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Good Fit D** (Supply feasible in combination with load sharing on VCC3)

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

Infineon AURIX™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584/5Q*	TLF35584/5Q* w/ TLF11251	TLF30682QV	TLE9243QK
2nd Gen	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

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Best Fit (Oversized)**

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)		◎	◎	◎	◎	TLS202x (150mA)
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)			◎		◎	TLS202x (150mA)
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)			◎		◎	TLS202x (150mA)
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)		◎	◎	◎	◎	TLS203x (300mA)
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)		◎	◎	◎	◎	TLS203x (300mA)
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)		◎	◎	◎	◎	TLS203x (300mA)
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)		◎	◎	◎	◎	TLS205x (500mA)

◎ Best Fit

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

Go Home!

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	
			TLF50201	TLF50211	TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			-	Enable	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

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

Go Home!

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	Best Fit	Best Fit
	S6J311E/D series	5V / 343mA (T_A = -40°C to +105°C)		Best Fit	Good Fit D	Best Fit	Best Fit
	S6J3120 series	5V / 255mA (T_A = -40°C to +105°C)		Best Fit	Good Fit D	Best Fit	Best Fit
	S6J3360 series	5V / 174mA (T_A = -40°C to +105°C)		Best Fit	Best Fit	Best Fit	Best Fit
	S6J3370 series	5V / 158mA (T_A = -40°C to +105°C)	Good Fit B	Best Fit	Best Fit	Best Fit	Best Fit
	S6J3400 series	5V / 150mA (T_A = -40°C to +125°C)	Good Fit B	Best Fit	Best Fit	Best Fit	Best Fit
	S6J3510 series	5V / 158mA (T_A = -40°C to +125°C)	Good Fit B	Best Fit	Best Fit	Best Fit	Best Fit

Best Fit

Good Fit B (Supply feasible depending on the use case of the µC)

Good Fit D (Supply feasible in combination with load sharing on VCC3)

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

Go Home!

Traveo™ Family		Maximum Current Consumption (real power pattern)	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK
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

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 ①②③				✓	✓	✓	*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				✓	✓	✓	*Post LDO* TLS208 800mA
	T2G-BH-16M CYT6BJ	Quad	I_{CCD} = 800mA @ 1.15V			Yes ③							

◎ Best Fit

✓ **Good Fit D** (Additional V_{DDD} cap needed for buffering in-rush current)

✓ **Best Fit (Oversized)**

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		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

✔ **Good Fit D** (Additional V_{DDD} cap needed for buffering in-rush current)

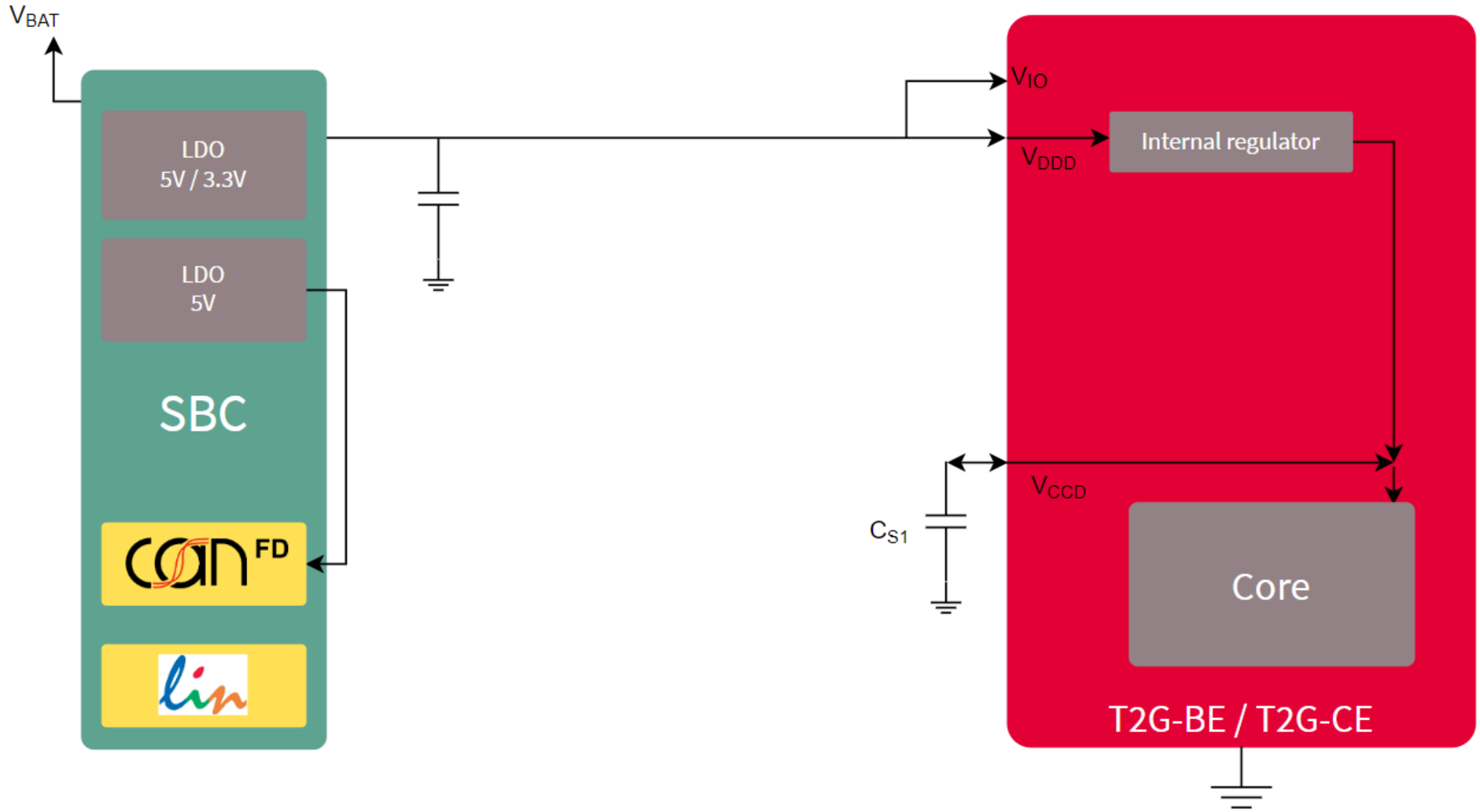
✔ **Best Fit (Oversized)**

①②③ Supply concept like defined in further slides

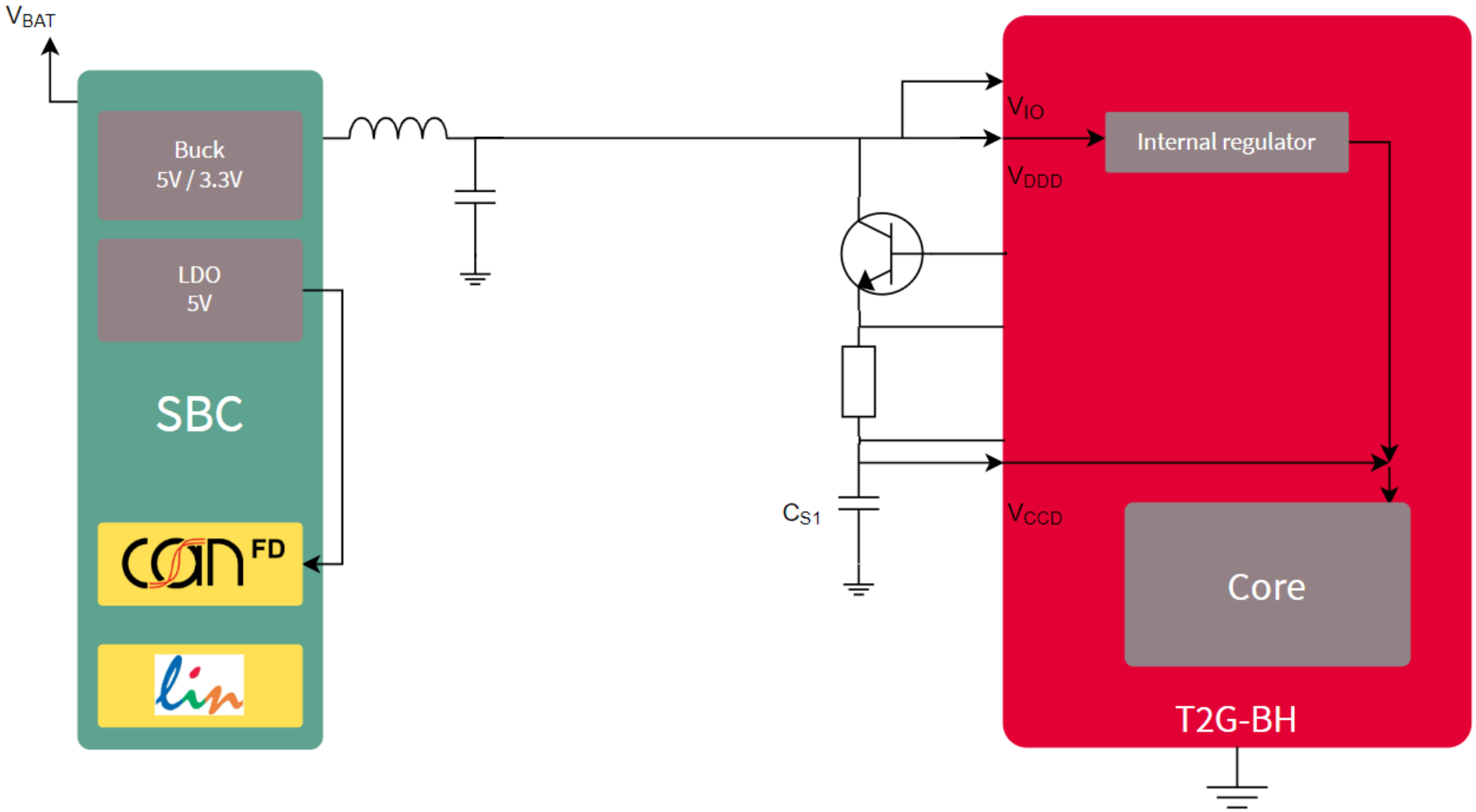
Note: * In-rush current through internal regulator to charge capacitor C_{S1} on core supply rail initially. Value for C_{S1} is a typical value. May differ due to application needs

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

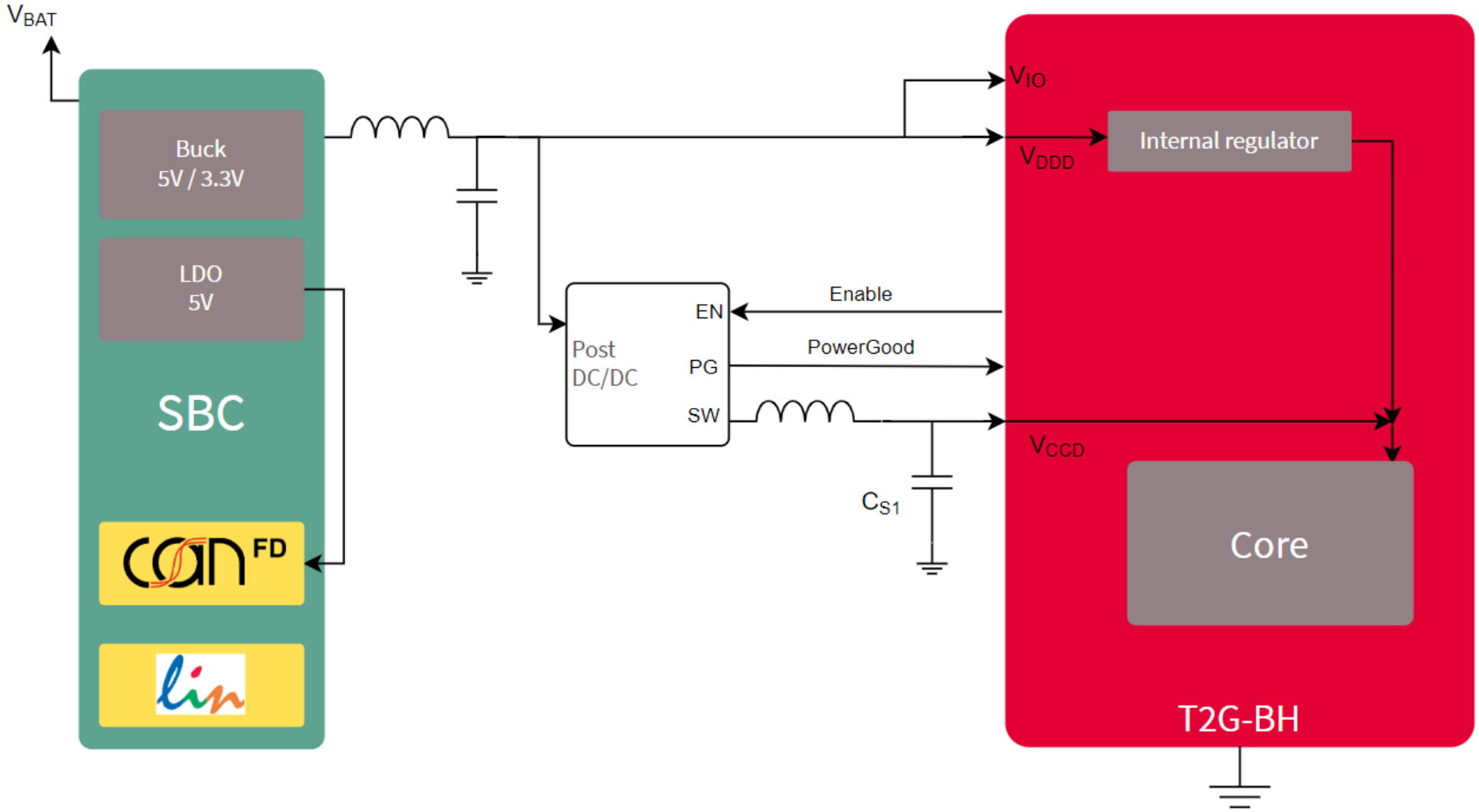
①: Supply concept example with internal core supply



②: Supply concept example with external pass transistor



③: Supply concept example with external core supply



Mapping OPTIREG™ PMIC with Traveo™ II Microcontroller

Go Home!

Traveo™ II Family		Maximum Current Consumption (real power pattern)	Need of external core supply	OPTIREG™ PMIC				OPTIREG™ linear & switcher
				ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant	Core Voltage
				TLF35584QV/QK/QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK	1.15V
2nd Gen.	TVII-B-E-512K CYT2B6 TVII-B-E-1M CYT2B7	IDDD = 102mA @3.3V / 5V IIO = 2 x 15mA @ 3.3V / 5V	No	◎	◎	◎	◎	
	TVII-B-E-2M CYT2B9 TVII-B-E-4M CYT2BL	IDDD = 110mA @3.3V / 5V IIO = 2 x 15mA @ 3.3V / 5V	No	◎	◎	◎	◎	
	TVII-B-H-4M CYT3BB/4BB	IDDD= 249mA @ 3.3V / 5V IIO = 2 x 15mA @ 3.3V / 5V	No	◎	◎	◎	◎	
		ICCD = 240mA @ 1.15V IDDD= 9mA @ 3.3V / 5V IIO = 2 x 15mA @ 3.3V / 5V IIOHS = 1 x 20mA @ 3.3V	Yes	◎	◎	◎		*Post LDO* TLS208 800mA
	TVII-B-H-8M CYT4BF	ICCD = 431mA @ 1.15V IDDD = 9.3mA @ 3.3V / 5V IIO = 2 x 15 mA @ 3.3V / 5V IIOHS = 2 x 20mA @ 3.3V	Yes	◎	◎	◎		*Post LDO* TLS208 800mA
	TVII-C-2D-6M CYT4D	ICCD = 1300mA @ 1.15V (with VIDEOSS) IIO = 2 x 15mA @ 3.3V / 5V IIOHS = 2 x 20mA @ 3.3V	Yes	◎	◎	◎		*DCDC* TLE8366EV 1A

◎ Best Fit

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

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

Mapping OPTIREG™ linear & SBC with PSoC® 4 Microcontroller

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				◎	◎	◎	✓	◎	◎

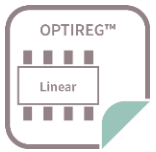
◎ Best Fit ✓ Best Fit (Oversized)

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

✔ **Good Fit A** (Additional Post LDO required for 3.3V rail)

✔ **Good Fit C** (High current might lead to limited thermal budget on LDO)

*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

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	
			TLF50201	TLF50211	TLF50241	TLF50251	TLF50281	TLS4120D0EP V33	TLS4125D0EP V50
			500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	2000mA (3.3V)	2500mA (5V)
			-	Enable	Reset	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

✓ **Good Fit A** (Additional Post LDO or DC-DC required for 3.3V rail) *Device without internal VREG.

*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

✓ **Good Fit B** (Supply feasible depending on the use case of the µC)

✓ **Good Fit D** (Supply feasible in combination with load sharing on VCC3)

*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™ and www.infineon.com/AURIX™

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

Go Home!

Texas Instrument C2000™ Family		Maximum Current Consumption	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584QV/QK/QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK
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

✓ **Good Fit A** (Additional post LDO required for 1.2V/1.8V rails of µC)

*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	◎	◎	◎	◎	◎	TLS202x (150mA)
	S32K118[1]	25.9mA @ 5V	◎	◎	◎	◎	◎	TLS202x (150mA)
	S32K142[2]	57.4mA @ 5V	◎	◎	◎	◎	◎	TLS202x (150mA)
	S32K144[2]	61.3mA @ 5V	◎	◎	◎	◎	◎	TLS203x (300mA)
	S32K146[2]	82.8mA @ 5V	◎	◎	◎	◎	◎	TLS203x (300mA)
	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

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

Go Home!

NXP S32K1xx Family		Maximum Power Consumption	OPTIREG™ switcher for Pre-Regulation and Core Voltages				
			12V Pre-Regulator Low Power DC-DC 500mA				
			TLF50201	TLF50211	TLF50241	TLF50251	TLF50281
			500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)	500mA (5V)
			-	Enable	Reset	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	◎	◎	◎	◎	◎

[1] Max. 48 MHz @ T_A = 125°C

[2] Max. 112 MHz @ T_A = 105°C

◎ Best Fit

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

Go Home!

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

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

NXP S32K1xx Family		Maximum Current Consumption	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK
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

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™ PMICs & SBCs with Renesas RH850 Microcontrollers

Mapping OPTIREG™ PMIC with Renesas RH850 Microcontroller

Go Home!

RH850 Family		Maximum Power dissipation	OPTIREG™ PMIC			
			ISO 26262 compliant	ISO 26262 compliant		ISO 26262 compliant
			TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK
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

✓ Best Fit (Oversized)

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

Mapping OPTIREG™ SBC with Renesas RH850 Microcontroller

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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)
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

✓ Best Fit (Oversized)

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

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
		TLF35584QV/QK/ QVH	TLF35585QV/QU	TLF30682QV	TLE9243QK
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

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

Mapping OPTIREG™ SBC with ST SPC5x Microcontroller

Go Home!

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

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