

up to 97 % efficiency



# DESIGN KIT

## Low Power – Point of Load Solutions



**600 mA to 1.5 A, Low Input  
Voltage Single and  
Dual Channel Converter**

### **Evaluation Boards**

SP6669, XRP6658, XRP6668, XRP6657

### **Inductors**


WE-LHMI, WE-SPC, WE-TPC, WE-PD2,  
WE-LQ


**Order Code IC-744 721**

**Version 1.0**

# Low Power – Point of Load Solutions

<b>Evaluation Board SP 6669</b>	<b>744 032 900 2</b>	<b>744 025 002</b>	<b>744 025 003</b>	<b>744 032 900 4</b>	<b>744 025 004</b>	<b>744 025 006</b>	<b>744 032 910 0</b>	<b>744 025 150</b>	<b>744 025 220</b>
	WE-LQ	WE-TPC	WE-TPC	WE-LQ	WE-TPC	WE-TPC	WE-LQ	WE-TPC	WE-TPC
	L: 2.2 $\mu$ H	L: 2.2 $\mu$ H	L: 3.3 $\mu$ H	L: 4.7 $\mu$ H	L: 4.7 $\mu$ H	L: 6.8 $\mu$ H	L: 10 $\mu$ H	L: 15 $\mu$ H	L: 22 $\mu$ H
	R <sub>DC</sub> : 0.126 $\Omega$	R <sub>DC</sub> : 0.057 $\Omega$	R <sub>DC</sub> : 0.085 $\Omega$	R <sub>DC</sub> : 0.195 $\Omega$	R <sub>DC</sub> : 0.1 $\Omega$	R <sub>DC</sub> : 0.142 $\Omega$	R <sub>DC</sub> : 0.390 $\Omega$	R <sub>DC</sub> : 0.356 $\Omega$	R <sub>DC</sub> : 0.525 $\Omega$
<b>Evaluation Board XRP 6658</b>	<b>744 373 240 10</b>	<b>744 373 240 15</b>	<b>744 043 002 2</b>	<b>744 373 240 33</b>	<b>744 089 430 68</b>	<b>744 089 431 50</b>	<b>Evaluation Board XRP 6668</b>		
	WE-SPC	WE-LHMI	WE-TPC	WE-LHMI	WE-SPC	WE-SPC			
	L: 1.0 $\mu$ H	L: 1.5 $\mu$ H	L: 2.2 $\mu$ H	L: 3.3 $\mu$ H	L: 6.8 $\mu$ H	L: 15 $\mu$ H			
	R <sub>DC</sub> : 0.022 $\Omega$	R <sub>DC</sub> : 0.0348 $\Omega$	R <sub>DC</sub> : 0.023 $\Omega$	R <sub>DC</sub> : 0.069 $\Omega$	R <sub>DC</sub> : 0.051 $\Omega$	R <sub>DC</sub> : 0.136 $\Omega$			
	<b>744 373 240 12</b>	<b>744 043 001 8</b>	<b>744 373 240 22</b>	<b>744 373 240 47</b>	<b>744 089 431 00</b>	<b>744 043 180</b>			
	WE-LHMI	WE-TPC	WE-LHMI	WE-LHMI	WE-SPC	WE-TPC			
	L: 1.2 $\mu$ H	L: 1.8 $\mu$ H	L: 2.2 $\mu$ H	L: 4.7 $\mu$ H	L: 10 $\mu$ H	L: 18 $\mu$ H			
	R <sub>DC</sub> : 0.025 $\Omega$	R <sub>DC</sub> : 0.020 $\Omega$	R <sub>DC</sub> : 0.051 $\Omega$	R <sub>DC</sub> : 0.095 $\Omega$	R <sub>DC</sub> : 0.095 $\Omega$	R <sub>DC</sub> : 0.138 $\Omega$			
<b>Evaluation Board XRP 6657</b>	<b>744 373 240 10</b>	<b>744 373 240 15</b>	<b>744 773 018</b>	<b>744 042 001 8</b>	<b>744 773 022</b>	<b>744 373 240 33</b>	<b>744 042 100</b>	<b>744 042 150</b>	<b>744 042 330</b>
	WE-LHMI	WE-LHMI	WE-PD2	WE-TPC	WE-PD2	WE-LHMI	WE-TPC	WE-TPC	WE-TPC
	L: 1.0 $\mu$ H	L: 1.5 $\mu$ H	L: 1.8 $\mu$ H	L: 1.8 $\mu$ H	L: 2.2 $\mu$ H	L: 3.3 $\mu$ H	L: 10 $\mu$ H	L: 15 $\mu$ H	L: 33 $\mu$ H
	R <sub>DC</sub> : 0.022 $\Omega$	R <sub>DC</sub> : 0.0348 $\Omega$	R <sub>DC</sub> : 0.028 $\Omega$	R <sub>DC</sub> : 0.040 $\Omega$	R <sub>DC</sub> : 0.2470 $\Omega$	R <sub>DC</sub> : 0.069 $\Omega$	R <sub>DC</sub> : 0.120 $\Omega$	R <sub>DC</sub> : 0.175 $\Omega$	R <sub>DC</sub> : 0.382 $\Omega$

 Best suitable inductor  
Evaluation board configuration

 Lowest profile inductor

All inductors are suitable, please refer to tables available in the booklet.

EMC COMPONENTS | INDUCTORS | TRANSFORMERS | RF COMPONENTS | CIRCUIT PROTECTION | EMC SHIELDING MATERIAL | CONNECTORS | SWITCHES | ASSEMBLY TECHNIQUE | POWER ELEMENTS

**Important information:** Würth Elektronik's design kits contain reference components. These components correspond with the current product development status on the day of supply. Exchange of the reference components to components with up-to-date product development status is not carried out automatically. No liability is taken for the use of these reference components. Therefore, please request new samples prior to releases for series production and product release.

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