

# RENESAS USB-PD FAMILY ~WITH SAFETY POWER TECHNOLOGY~

## **USB VOLTAGE SUPPLY "RAA230161"**

### **Supporting the Power Rules requirements in USB Power Delivery 3.0**

#### **Features**

#### 95% efficiency and suppresses heat generation

The step down DC/DC handles currents up to 3 A 20-pin HTSSOP package with a built-in heat sink

#### Supports the Power Rules in USB PD 3.0

Output voltage: 5 V, 9 V, 12 V, 15 V, 20 V (selectable) Set by R9A02G011 USB PD controller

#### Implements safe and reliable power supply equipment

Includes a full complement of protection functions Reducing the circuit board mounting area by 50%

#### **Solutions**

RAA230161 has multi-voltage outputs from 5 V to 20 V with 95% efficiency of DC/DC. The IC provides high-functionality power supply monitoring and protection circuits for easy design of safe and reliable systems. **Previous Solution Renesas Solution** 24 V **VBUS** Renesas DC/DC **VBUS** USB Voltage Supply 24 V to 20 V 5 V to 20 V RAA230161 15 V DC/DC 24 V 24 V to 15 V 9 V DC/DC 24 V to 9 V R9A02G011 5 V DC/DC 24 V to 5 V Renesas USB PD Controller R9A02G011

In addition, solution boards for various applications are available (AC adapter, hub, general purpose equipment, etc). Renesas provides board information and availability on its web site.

Renesas is a founding member, USB Board

Refer to "http://www.renesas.com/" for information on the latest and detailed sales offices.



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