

## NEW! AN3018xA Series

### Multi-Channel DC/DC Step-Down Regulator with Integrated FET and LDO Fast Response, Small Size, I2C Control

Panasonic, a worldwide leader in Semiconductor Products, introduces the **New AN3018xA Series Multi-Channel DC/DC Step-Down Regulators with Integrated FET and LDO**. The **New AN3018xA Series** parts offer a power management LSI Step-Down DC/DC Regulator (1 to 2ch) that uses Panasonic's original Hysteretic DC/DC core control system. By employing this system, when the load current changes suddenly, the **New AN3018xA Series** parts respond at high speed and minimize output voltage changes. Since it is possible to use capacitors with small capacitance and it is unnecessary to use parts for phase compensation, these IC's allow for downsizing of set and a reduction in the number of external parts. Output voltages are variable by DAC (0.8 to 3.3 V) and maximum current is up to 1.2 A. This LSI has a LDO circuit which output voltage and can change by DAC (0.9 to 3.3V) and maximum current up to 0.3 A.

#### Features:

- High-Speed Response
- Output Voltage Range: 0.8V to 3.3V
- Input Voltage Range: 2.9V to 5.5V (Can be supported by Panasonic Li-Ion Battery)
- High Efficiency Over a Wide Load Current Area by DCM (Discontinuous Conductive Mode) Operation at Light Loads, CCM (Continuous Conductive Mode) Operation in Heavy Loads
- DCM and CCM Can Be Automatically Switched
- Switching Frequency: 3.0MHz during CCM
- 100% Duty Operation When Input Voltage Equals Output Voltage
- I2C Control for ON/OFF and Output Voltage DAC Setting (DC/DC and LDO)
- 2-Slave Address Selectable
- Small Size (WLCSP): 1.5mm x 4 mm Square
- Built-In Under Voltage Lockout (UVLO), Thermal Shut Down (TSD), Output Over-Current Protection (OCP), Short-Circuit Protection (SCP) Functions

#### Industries:

- Computer Peripheral
- Consumer Electronics
- Home Entertainment
- Medical
- Other

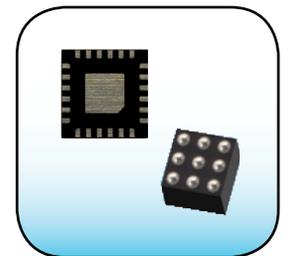
#### Applications:

- Home and Portable Devices
- Mobile Devices
- Solid State Drives
- Personal Computers
- Game Consoles
- Cameras
- WLAN
- Office Automation Equipment
- Electronic Devices

#### Additional Information:

For detailed specification information on these NEW AN3018xA Series Multi-Channel DC/DC Step-Down Regulator with Integrated FET and LDO please visit: [panasonic.com/industrial/includes/zip/AN3018xA\\_Datasheet.zip](http://panasonic.com/industrial/includes/zip/AN3018xA_Datasheet.zip) today!

**Website:** [panasonic.com/industrial/semiconductors](http://panasonic.com/industrial/semiconductors)



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Fast Response, Small Size, I2C Control

### Benefits:

- High Efficiency Due to Built-In Field Effect Transistors, Especially When Power Conversion Efficiency Has Reached 80% at a Low Load Current Region. This Contributes to the Equipment's Energy Conservation and Battery Life
- Small Size: The Number of Components to be Mounted on a Power Supply Board Can Be Reduced. Utilization Reduces Mounting Dimensions up to 25%
- Fast Response: The LSIs Respond to Rapid Changes in the Output Load at High Speed and Significantly Suppress Variations in the Output Voltage
- Undershoot: 20 mV; Overshoot: 20 mV (Output Capacitor: 4.7μF)
- These Characteristics Ensure a Large Margin in the Operating Voltage Range of the Field Programmable Gate Arrays (FPGA), Memories, Digital Signal Processors (DSP) and Other Components Installed in Personal Computers and Servers

### Part Number Information:

