Descriptions

TCS9719 device is low R_{ON} MOSEFT controlled by external logic pin, allowing optimization of battery life, and portable device autonomy. It includes a P-channel MOSFET that operates over an input voltage range of 1.2V to 5.5V. An on/off input (ON) controls the switch that can interface with low voltage control signals. A 120Ω on chip load resistor is added for output quick discharge when the switch is turned off. TCS9719 is packaged in WLCSP-4 with 0.4mm pitch. It is characterized for operation over the free-air temperature range of -40°C to 85°C.

Features

- **Low-Input Voltage: 1.2V to 5.5V**
- **Ultra-Low ON-State Resistance**
  - **r_{ON}=48mΩ at V_{IN}=5.0V**
  - **r_{ON}=50mΩ at V_{IN}=4.2V**
  - **r_{ON}=55mΩ at V_{IN}=3.6V**
  - **r_{ON}=65mΩ at V_{IN}=2.5V**
  - **r_{ON}=85mΩ at V_{IN}=1.8V**
  - **r_{ON}=175mΩ at V_{IN}=1.2V**
- **DC Current Up to 2A**
- **Ultra-Low Quiescent Current: 67nA at 1.8V**
- **Ultra-Low Shutdown Current: 33nA at 1.8V**
- **Low Control Input Thresholds Enable Use of 1.2V/1.8V/3.6V/4.2V/5.0V Logic**
- **Controlled Slew Rate to Avoid Inrush Current**
- **Package: WLCSP-4 (0.4mm Pitch)**

Applications

- **Cellular Phones**
- **GPS Devices**
- **Digital Cameras**
- **Peripheral Ports**
- **Portable Instrumentation**
- **RF Modules**
- **Personal Digital Assistants (PDAs)**
- **MP3 Players**

Typical Application