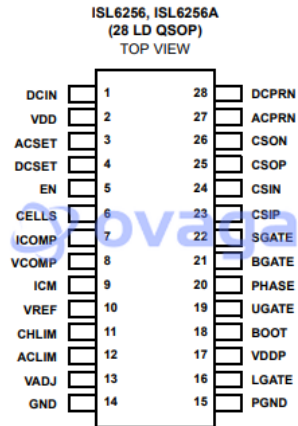


Battery Charger Li-Ion/Li-Pol 4.2V 28Pin QSOP W

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	QSOP-28
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL6256AHAZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ISL6256, ISL6256A is a highly integrated battery charger controller for Li-ion/Li-ion polymer batteries. High Efficiency is achieved by a synchronous buck topology and the use of a MOSFET, instead of a diode, for selecting power from the adapter or battery. The low side MOSFET emulates a diode at light loads to improve the light load efficiency and prevent system bus boosting. The constant output voltage can be selected for 2, 3 and 4 series Li-ion cells with 0.5% accuracy over-temperature. It can also be programmed between  $4.2V + 5\%/cell$  and  $4.2V - 5\%/cell$  to optimize battery capacity. When supplying the load and battery charger simultaneously, the input current limit for the AC adapter is programmable to within 3% accuracy to avoid overloading the AC adapter, and to allow the system to make efficient use of available adapter power for charging. It also has a wide range of programmable charging current. The ISL6256, ISL6256A provides outputs that are used to monitor the current drawn from the AC adapter, and monitor for the presence of an AC adapter. The ISL6256, ISL6256A automatically transitions from regulating current mode to regulating voltage mode. ISL6256, ISL6256A has a feature for automatic power source selection by switching to the battery when the AC adapter is removed or switching to the AC adapter when the AC adapter is available. It also provides a DC adapter monitor to support aircraft power applications with the option of no battery charging.

## Features

±0.5% Charge Voltage Accuracy (-10°C to +100°C)

±3% Accurate Input Current Limit

±3% Accurate Battery Charge Current Limit

±25% Accurate Battery Trickle Charge Current Limit

Programmable Charge Current Limit, Adapter Current Limit and Charge Voltage

Fixed 300kHz PWM Synchronous Buck Controller with Diode Emulation at Light Load

Overvoltage Protection

Output for Current Drawn from AC Adapter

AC Adapter Present Indicator

Fast Input Current Limit Response

Input Voltage Range 7V to 25V

Support 2-, 3- and 4-Cells Battery Pack

Up to 17.64V Battery-Voltage Set Point

Control Adapter Power Source Select MOSFET

Thermal Shutdown

Aircraft Power Capable

DC Adapter Present Indicator

Battery Discharge MOSFET Control

Less than 10µA Battery Leakage Current

Supports Pulse Charging

Pb-free (RoHS Compliant)

ISL6256, ISL6256A  
(28 LD QSOP)  
TOP VIEW

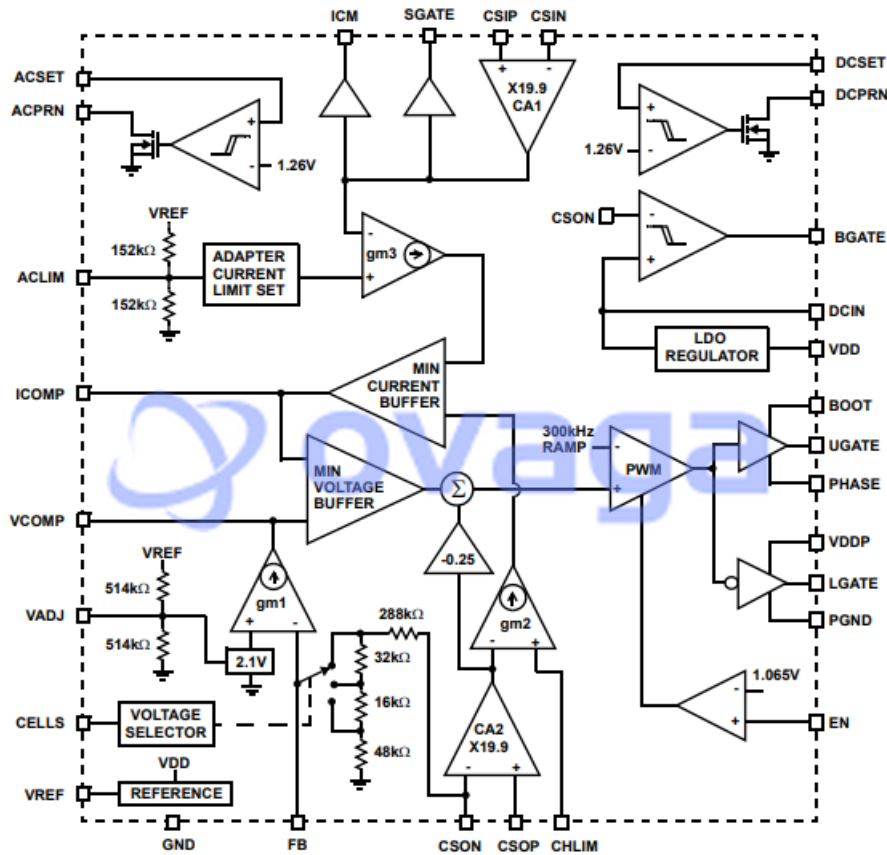
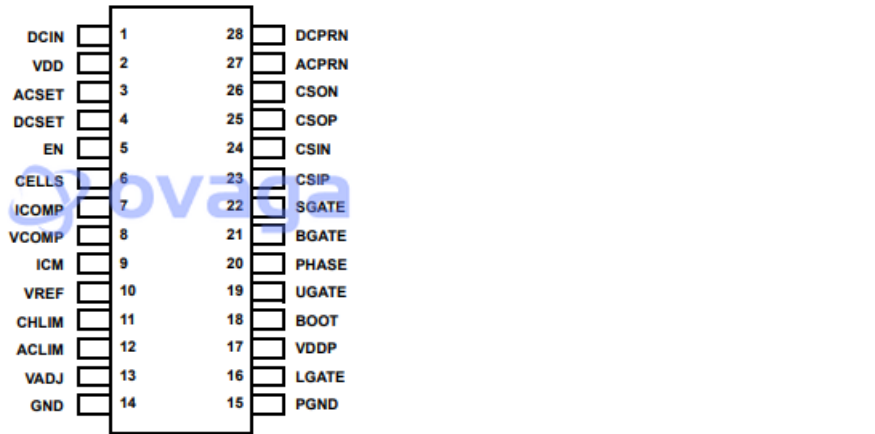


FIGURE 1. FUNCTIONAL BLOCK DIAGRAM

Related Products



[ISL6262ACRZ](#)

Renesas Technology Corp  
QFN-48



[ISL6294IRZ-T](#)

Renesas Technology Corp  
QFN-8



[ISL21080CIH315Z-TK](#)

Renesas Technology Corp  
SOT-23-3



[ISL6506BCBZ](#)

Renesas Technology Corp  
SOP-8



[ISL6377HRZ-T](#)

Renesas Technology Corp  
QFN-48



[ISL62771HRTZ-T](#)

Renesas Technology Corp  
40-WFQFN Exposed Pad



[ISL62771HRTZ](#)

Renesas Technology Corp  
QFN40



[ISL95808HRZ-T](#)

Renesas Technology Corp  
DFN-8