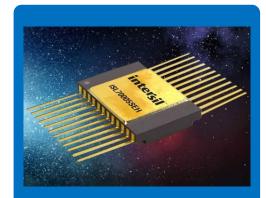


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ISL73005SEH RadHard Dual POL & LDO

Integrated Synchronous Buck and Low Dropout Regulator

The ISL70005SEH and ISL73005SEH are radiation hardened dual output Point-of-Load (POL) regulators combining the high efficiency of a synchronous buck regulator with the low noise of a Low Dropout (LDO) regulator. They are suited for systems with 3.3V or 5V power buses and can support continuous output load currents of 3A for the buck regulator and ±1A for the LDO.

The buck regulator uses a voltage mode control architecture and switches at a resistor adjustable frequency of 100kHz to 1MHz. Externally adjustable loop compensation allows for an optimum balance between stability and output dynamic performance. The internal synchronous power switches are optimized for high efficiency and excellent thermal performance.

The LDO is completely configurable independent of the switching regulator. It uses NMOS pass devices and separate chip bias voltage (L_VCC) to drive its gate, enabling the LDO to operate with a very low voltage at the L_VIN input. The LDO can sink and source up to 1A continuously, making it an ideal choice to power DDR memory.

Two Different Evalboards are available.



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