

## Power Control Circuits

### Power-Supply Supervisory Circuits

Type	Function	Description	Package Number of Pins*
ICL7663S	Programmable micro-power positive voltage regulator	Low-power, high-efficiency device ( $I_O = 4\mu A$ max.) that accepts an input of 1 to 16V and provides an adjustable output over the same range at up to 40mA load. $T_A$ Range: 0 to +70°C, -25 to +85°C. Line and load regulation and ESP protection (>2000V).	BA, JA, PA, TV
ICL7680	-5V to ±15V voltage converter/regulator	Boost-type switched-mode converter inverter chip to convert +5 to ±15V regulated outputs. Features current limiting protection with external shut down. $T_A$ Range: 0 to +70°C.	JE, PE
ICL7660S	Voltage converter	Performs supply voltage conversion from positive to negative. Input range is +1.5V to +10V resulting in complementary output voltages of -1.5V to -12V. Can be connected as a voltage doubler to generate output voltage of -18.6V. $T_A$ Range: 0 to +70°C, -55 to +125°C. ICL7660S improved version of ICL7660. Has extended supply voltage range, lower supply current, and ESD protection (>2000V).	BA, PA, TV
ICL7662S	Voltage converter	Similar to the ICL7660 in its operation, except the output voltages are -4.5V to -20V. Doubler output 22.6V.	PA, TV
ICL7665S ICL7665	Programmable micro-power under/over voltage detector	Contains two individually programmable voltage comparators and requires only 3μA supply current. Intended for battery-operated systems that require low or high voltage warnings, etc. Open drain outputs for interfacing. $T_A$ Range: 0 to +70°C, -25 to +85°C. ICL7665S improved ICL7665. For features, see ICL7663S.	BA, JA, PA, TV
ICL8211	Programmable voltage level detector	Contains a 1.15V reference, a comparator, a hysteresis output and a non-inverting main-output. Provides a 7mA current-limited output sink when voltage on threshold terminal is <1.15V. $T_A$ Range: 0 to +70°C, -55 to +125°C.	BA, JA, PA, TV
ICL8212	Programmable voltage level detector	Similar in operation to the ICL8211 except that its main output is inverting as opposed to non-inverting. Requires a voltage in excess of 1.15V to switch its output on (no current limit). $T_A$ Range: Same as ICL8211.	
ICL7667	Dual power MOSFET driver	TTL-compatible high-speed CMOS driver designed to provide high output current (1.5A) and voltage (up to +15V) for driving the gates of power MOSFETs in high-frequency switched-mode power converters. $T_A$ Range: 0 to +70°C, -55 to +125°C.	BA, JA, PA, TV
HV-250/255	MOSFET drivers	Complementary power. Wide supply range (20V to 450V). High peak output current of 2A. High switching speed 200ns.	-
HV-350/355		Totem pole N-channel power MOSFET driver. Wide supply range (20V to 450V). High peak output current of 2A. High switching speed of 200ns.	-
ICL7673	Automatic battery backup switch	Automatically switches between a main power supply (eg., +5V) and a battery back-up supply, when the main supply is removed. Wide supply range: 2.5V to 15V. $T_A$ Range: 0 to +70°C, -25 to +85°C.	BA, PA, TV
ICL7675 ICL7676	Switched-mode power-supply controller set	Two-chip set provides required control circuitry for a 50W - 150W isolated-type flyback-type switching power supply. ICL7675 primary side controller provides main power-switch drive. ICL7676 secondary side controller monitors the regulated output. $T_A$ Range: 0 to +70°C, -25 to +85°C, -55 to +125°C.	JA, PA
ICL7677	CMOS power fail detector	Used on primary side of power supply with opto isolators transmitting the fault indication to the equipment on the secondary side. Also used on secondary side to drive TTL/CMOS logic at fault indicating outputs. $T_A$ Range: 0 to +70°C, -25 to +85°C, -55 to +125°C.	JN, PN

\* See interpretation guide and packaging section