LD56020, LD57100, ST730, LD49100, LDLN050



High performance low-dropout (LDO) linear regulators





Wide input range, low consumption, low-dropout voltage regulators

Beside a complete portfolio of industry-standard regulators for both positive and negative output, ST offers an ever-expanding range of high performance LDO regulators with low quiescent current, low noise, high PSRR in small package to help you develop new solutions.

LD56020 best in class for High PSRR and very low input voltage.

LD57100 suitable for low power battery-operated applications.

ST730 very low consumption and wide input range.

LD49100 industrial and AEC-Q100 qualified with very good drop performance at full load.

LDLN050 excellent noise performance and fast startup.

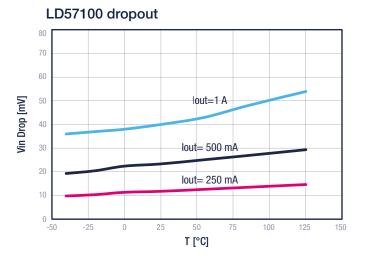
KEY FEATURES & BENEFITS

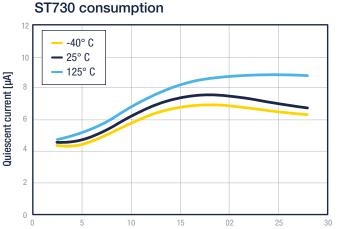
- High accuracy
 - Used for post regulation down to 1 V
- Very low consumption
 - Enhanced lifetime of battery-powered devices
 - Reduced power dissipation
- Hgh PSRR
- Ultra-low noise
- Signal integrity in low noise applications
- Small packages
 - Space saving in the application board

KEY APPLICATIONS

- Portable and wearable
- Mobile phones
- Smoke detectors
- Industrial
- ADAS

Examples of key parameters

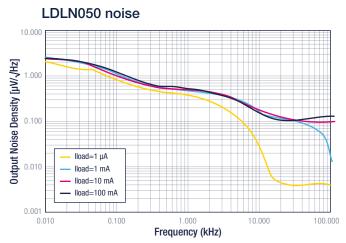




Input voltge [V]

LD56020 PSRR 100 Vripple=200 mVpkpk Cout=1 uF MLCC 0603 90 lload=20 mA V FN=1 V Magnitude (dB) Headroom=500 mV Headroom=1 V Headroom=450 mV Headroom=400 mV 20 Headroom=300 mV Headroom=350 mV 10 Headroom=250 mV Headroom=200 mV 1.000,00 10.000,00

Frequency (kHz)



LDO product table

Commercial	Description	Package	I _{out} [mA]	Ι _ο [μΑ]	Drop [mV]	PSRR [dB]
ST730*/ST732	28 V, 300 mA very-low Iq	S0T23-5L	300	5	600	75
LD56020	Ultra low input voltage, 200 mA, low noise and high PSRR	Flip-Chip4, SOT23-5L	200	18	120	95
LD57100	Ultra-low dropout, 1 A, with bias	Flip Chip6	1000	35	40	75
LD49100	Low quiescent current low dropout 1 A	DFN6 3x3	1000	20	200	62
LDLN050	500 mA. low noise, low dropout	DFN8 3x3	500	48	190	65

^{*} The ST730 is part of the STEVAL-QUADV01.



STEVAL-QUADV01

4-in-1 DC regulator solution based on the L6981, L7983, ST1PS03 step-down converters, and the ST730 LD0





