

IO-Link System IC

Features:

- One IO-Link compliant channel with up to 500 mA driving current
- Additional high voltage output with same driving capabilities
- Outputs configurable as P-Mode, N-Mode and Push-Pull
- Integrated reverse-polarity protection
- DC/DC Buck-converter for dissipation minimization
- LDO voltage regulator (programmable as 3.3/5 V)
- Temperature compensated on-chip RC oscillator with $\pm 2\%$ frequency accuracy
- Overvoltage/high current protection
- High temperature protection
- SPI for communication
- Integrated UART (supports COM1-3)
- Hardware frame handler (frame type 0, 1.1-1.2 and 2.1-2.6; master/device mode)
- QFN24 package

Parameters	Condition	Min	Typ	Max	Unit
Supply voltage	$V_{L+} - V_{L-}$	9	24	30	V
IO-Link Input voltage	$V_I = V_{C/Q} - V_{L-}$	-1		34	V
IO-Link Output current				500	mA
Output voltage DC/DC-Converter		5.5	7	8.5	V
Switching frequency DC/DC-Converter		0.8		1.4	MHz
Output current DC/DC-Converter				60	mA
Output voltage Low-Drop-Regulator	3.3V programmed	3,1	3,3	3,5	V
	5 V programmed	4,75	5	5,25	V
Output current Low-Drop-Regulator	DC/DC active			50	mA
Power dissipation	QFN24 package			1	W
Temperature range	ϑ_{op}	-40		85	°C
Frequency variation RC oscillator		-2		+2	%

