

SELECTION GUIDE

LIN RGB - SBC

Chameleons are famous for their quick skin color-changing abilities. They change color in response to environmental changes. We therefore link these wonderful creatures to our LIN RGB products which enable changing ambient light according to the car driver's preference.

We incorporate the newest and most operationally intensive LIN network applications into next generation vehicles.

LIN transceiver and system basic ICs overview - Cross reference List

Part Number	MLX80020	MLX80002	MLX80004	MLX80050	MLX80030	MLX80051	MLX80031
# LIN	1	2	4	1	1	1	1
Supply voltage	5 to 18V (26V)						
Output Voltage	n.a.	n.a.	n.a.	5V	3.3V	5V	3.3V
Output current	no	no	no	70mA (thermally limited from package)			
RESET Output	no	no	no	yes	yes	yes	yes
Window Watchdog	no	no	no	no	no	yes	Yes
Package	SOIC-8	QFN 4x4 24pins	QFN 4x4 24pins	SOIC-8	SOIC-8	QFN 5x5 20pins	QFN 5x5 20pins
LIN Spec	LIN 2.x, J2602						
Temp. Range	-40 to 125°C						
Status	PPAP AECQ-100/Production						

Quick Reference Ambient Lighting – Overview of available products

	GEN 1			GEN 2			GEN 3
Part Number	MLX81108	MLX81109	MLX80110	MLX81112	MLX81115	MLX81120	MLX81113
MCU	16-bit RISC	16-bit RISC	16-bit RISC	16-bit RISC	16-bit RISC	16-bit RISC	16-bit pipelined RISC
Supply Voltage	5 to 18V (26V)	5 to 18V (26V)	5 to 18V (26V)	5 to 18V (26V)	5 to 18V (26V)	5 to 18V (26V)	4.5 to 18V (26V)
Program Memory	32k Flash	32k Flash	32k ROM	32k Flash +System ROM	32k Flash +System ROM	32k Flash +System ROM	32k Flash +System ROM
EEPROM	380Byte	380Byte	380Byte	256Byte	256Byte	256Byte	368 Byte
LED Driver	4	4	4	4	6	4	4
LED Current per Channel	48mA	48mA	48mA	48mA	48mA	48mA	60mA
Progr. Current Steps	3mA (0..30mA) 6mA (36..48mA)	3mA (0..30mA) 6mA (36..48mA)	3mA (0..30mA) 6mA (36..48mA)	3mA (0..30mA) 6mA (36..48mA)	3mA (0..30mA) 6mA (36..48mA)	3mA (0..30mA) 6mA (36..48mA)	5mA
PWM Resolution	16-bit	16-bit	16-bit	16-bit	16-bit	16-bit	16-bit
Min. LED Current Resolution	46nA	46nA	46nA	46nA	46nA	46nA	76nA
Special Feature	-	8-digital IO's 5.6V Vref output	-	-	-	LIN-to-LIN Gateway	-
Temperature Range	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C
Package	SOIC-8 fused	QFN 5x5 20	SOIC-8 fused	SOIC-8 fused	DFN 4x4 12	DFN 4x4 12	SOIC-8ep/DFN 3x3
Status	PPAP	PPAP	PPAP	PPAP	PPAP	PPAP	PPAP

