

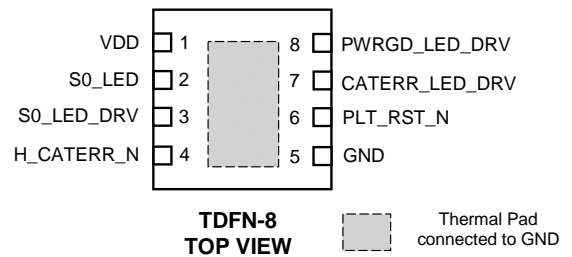


General Description

Silego SLG7NT4084 is a low power and small form device. The SoC is housed in a 2mm x 2mm TDFN package which is optimal for using with small devices.

Features

- Low Power Consumption
- 3.3V Supply
- Pb-Free / RoHS Compliant
- Halogen-Free
- TDFN-8 Package

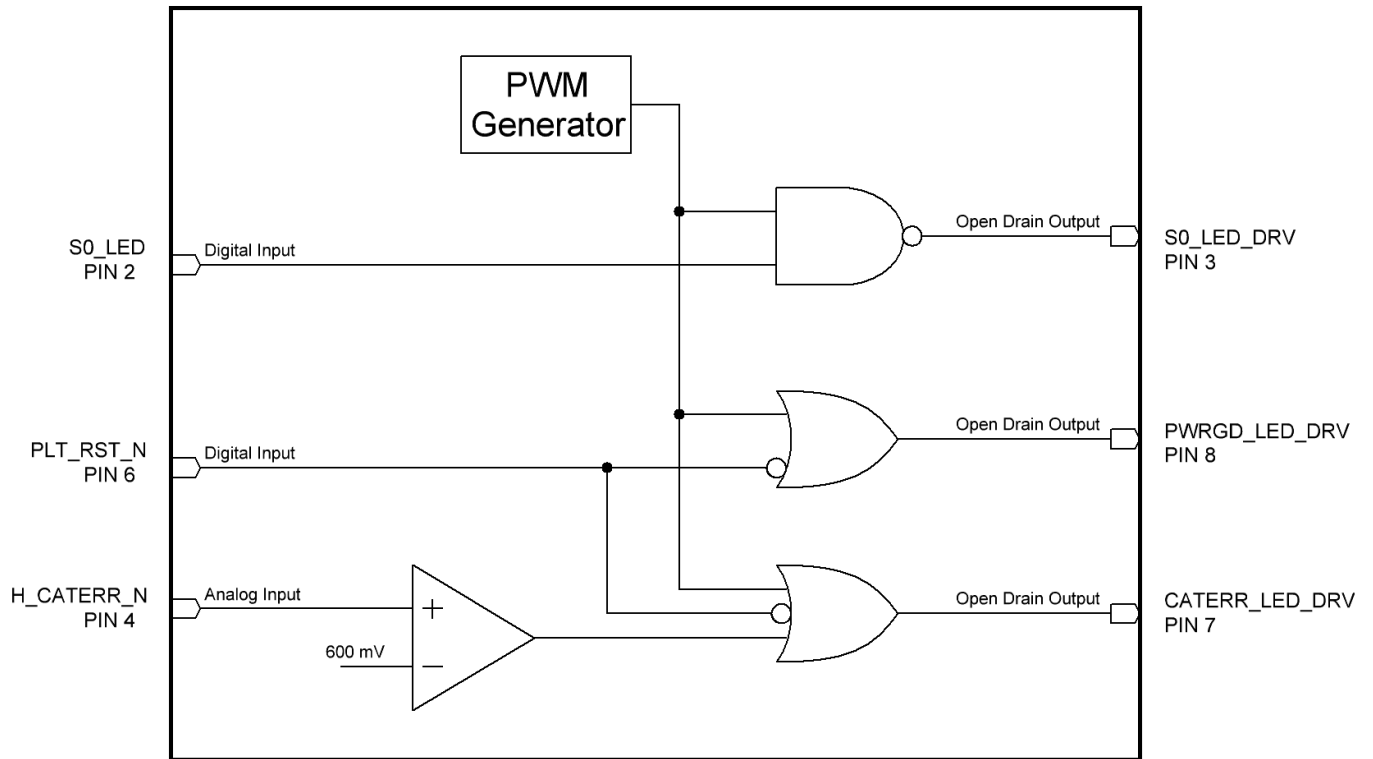


Output Summary

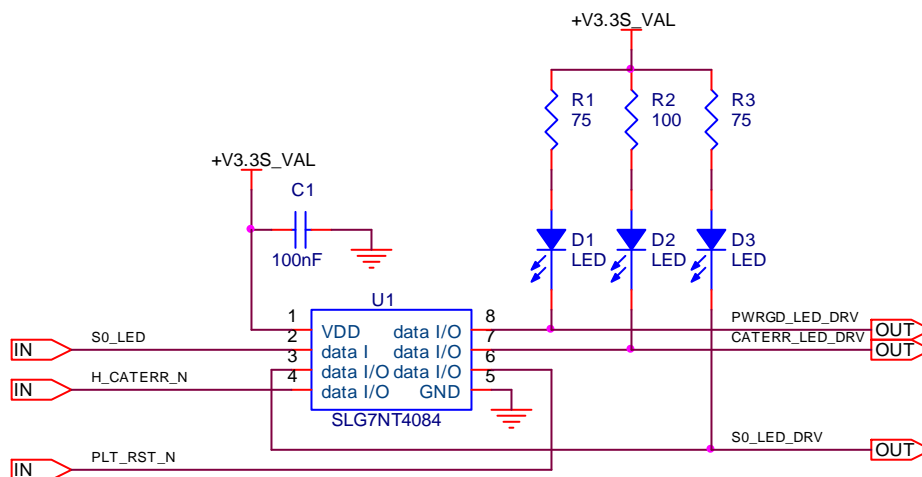
- 3 Outputs – Open Drain



Block Diagram



Typical Application Circuit





Pin Configuration

Pin #	Pin Name	Type	Pin Description
1	VDD	Power	3.3V Supply Voltage
2	S0_LED	Input	Digital input
3	S0_LED_DRV	Output	Open Drain
4	H_CATERR_N	Input	Analog input
5	GND	GND	Ground
6	PLT_RST_N	Input	Digital input
7	CATERR_LED_DRV	Output	Open Drain
8	PWRGD_LED_DRV	Output	Open Drain
Exposed Bottom Pad	GND	GND	Ground

Ordering Options & Configuration

Part Number	Package Type
SLG7NT4084V	V = TDFN-8
SLG7NT4084VTR	VTR = TDFN-8 – Tape and Reel (3k units)



Absolute Maximum Ratings

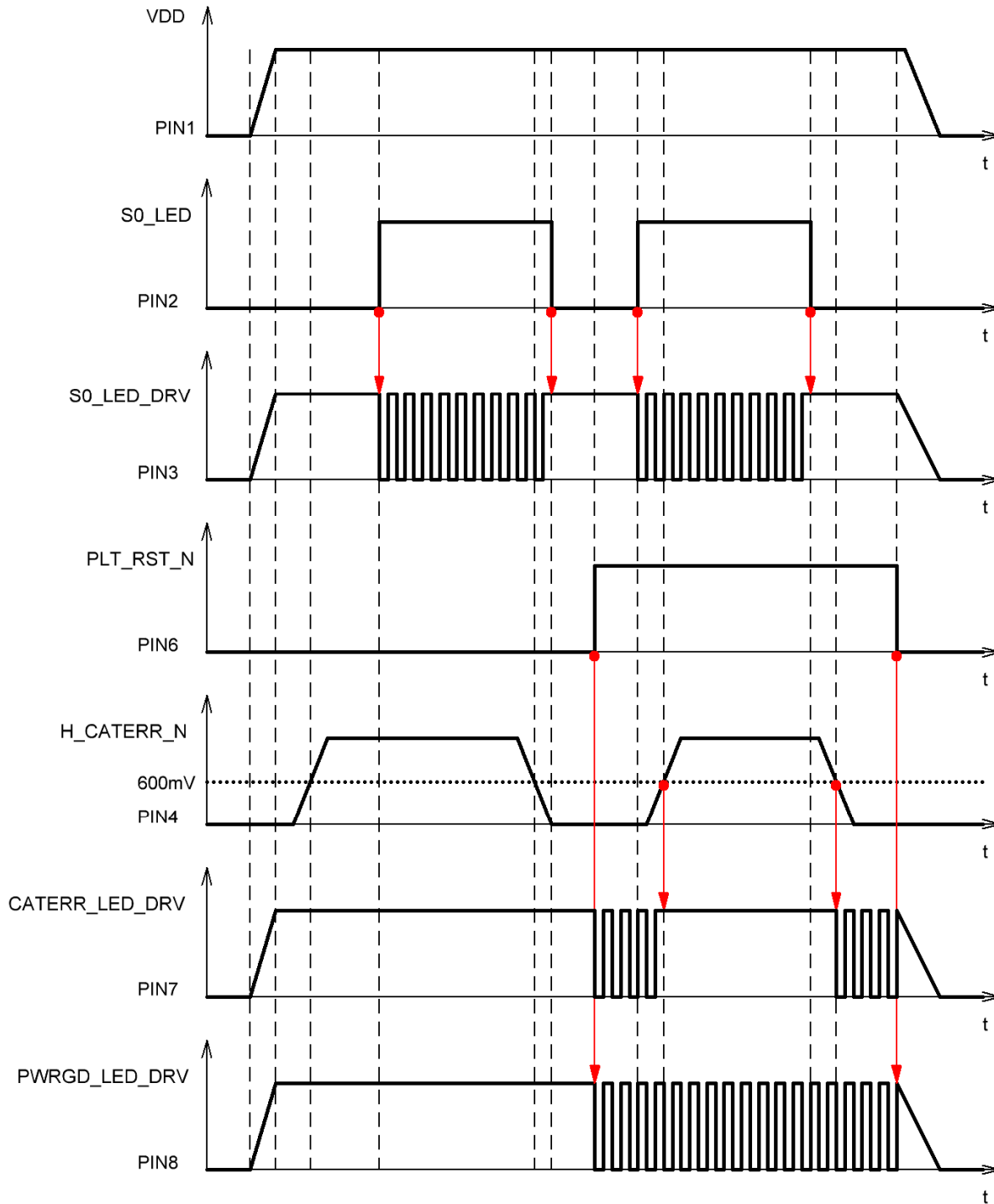
Parameter	Min.	Max.	Unit
V _{DD} to GND	-0.3	4.6	V
Voltage at input pins	-0.3	4.6	V
Current at input pin	-1.0	1.0	mA
Storage temperature range	-65	150	°C
Junction temperature	--	150	°C

Electrical Characteristics

Symbol	Parameter	Condition / Note	Min	Typ	Max	Unit
V _{DD}	Supply Voltage		3.0	3.3	3.6	V
I _Q	Quiescent Current	Static Inputs and Outputs	--	35	--	μA
T _A	Operating temperature		-40	25	85	°C
V _{IH}	HIGH-Level Input Voltage	Logic Input	1.8	--	--	V
V _{IL}	LOW-Level Input Voltage	Logic Input	--	--	0.95	V
V _{ACMP}	Analog Comparator Input Voltage	Analog Comparator Threshold Variation Including Hysteresis	515	--	685	mV
I _{IH}	HIGH-Level Input Leakage Current	Logic Input Pins; VIN=3.3V	-100	--	100	nA
I _{IL}	LOW-Level Input Leakage Current	Logic Input Pins; VIN=0V	-100	--	100	nA
V _{OL}	LOW-Level Output Voltage	Open Drain Logic Level Outputs	--	--	0.4	V
I _{OL}	LOW-Level Output Current	Open Drain	--	20	--	mA
T _{StUp}	Start Up Time	After VDD reaches 1.4V level	--	7	--	ms

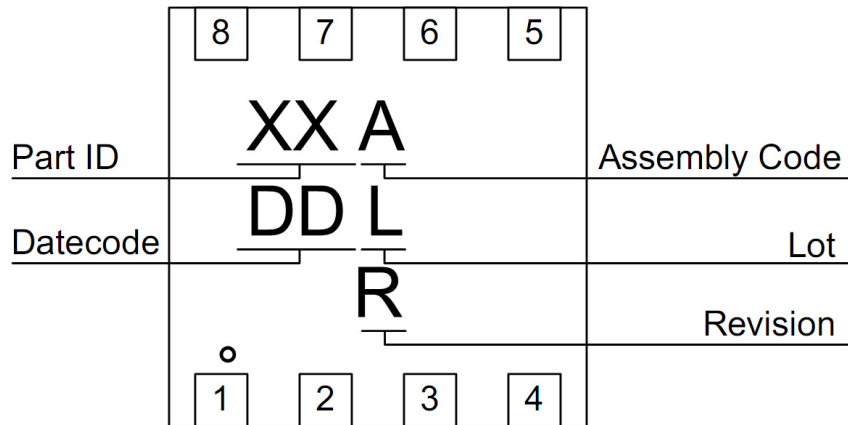


Timing Diagram





Package Top Marking



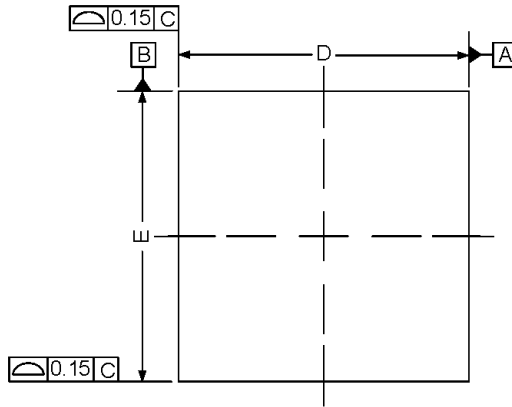
- XX – Part ID Field: identifies the specific device configuration
- A – Assembly Code Field: Assembly Location of the device.
- DD – Date Code Field: Coded date of manufacture
- L – Lot Code: Designates Lot #
- R – Revision Code: Device Revision

Datasheet Revision	Programming Code Number	Part Code	Revision	Date
1.01	06	JU	F	12/10/2012

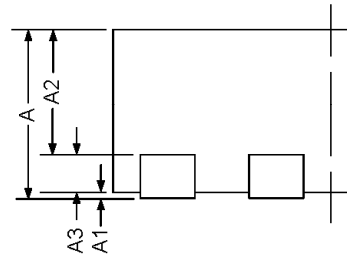
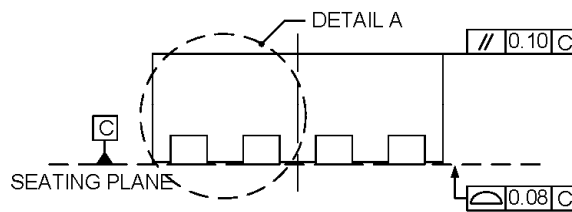


Package Drawing and Dimensions

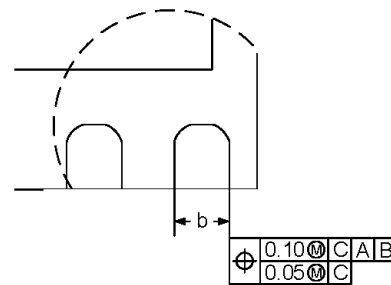
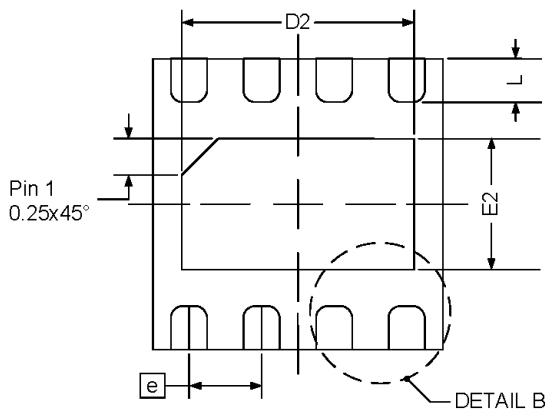
TDFN-8 Package JEDEC MO-229, Variation WCCD



Symbol	Min (mm)	NOM (mm)	Max (mm)
A	0.70	0.75	0.80
A1	0.00	--	0.05
A2	--	0.55	--
A3	--	0.20	--
b	0.20	0.25	0.30
D	1.90	2.00	2.10
D2	1.50	1.60	1.70
E	1.90	2.00	2.10
E2	0.80	0.90	1.00
e	0.50 BSC		
L	0.20	0.30	0.40



DETAIL A



DETAIL B

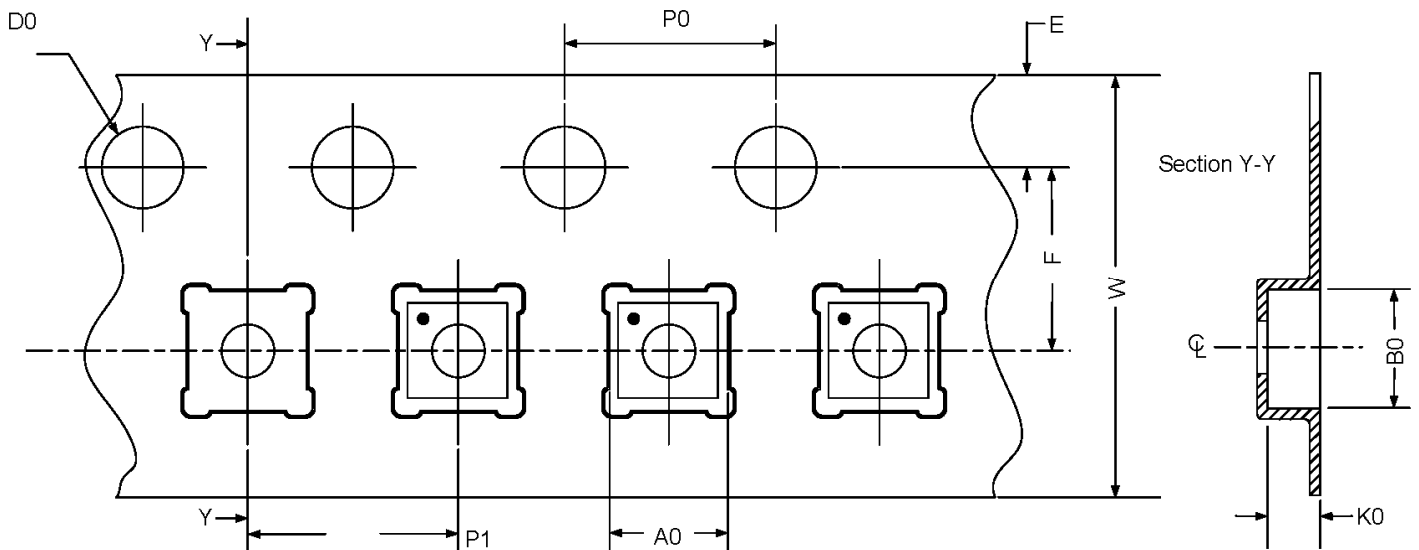


Tape and Reel Specification

Package Type	# of Pins	Nominal Package Size (mm)	Max Units		Reel & Hub Size (mm)	Trailer A		Leader B		Pocket (mm)	
			per reel	per box		Pockets	Length (mm)	Pockets	Length (mm)	Width	Pitch
TDFN 8L 2x2mm Green	8	2x2x0.75	3000	3000	178/60	100	400	100	400	8	4

Carrier Tape Drawing and Dimensions

Package Type	Pocket BTM Length (mm)	Pocket BTM Width (mm)	Pocket Depth (mm)	Index Hole Pitch (mm)	Pocket Pitch (mm)	Index Hole Diameter (mm)	Index Hole to Tape Edge (mm)	Index Hole to Pocket Center (mm)	Tape Width (mm)
	A0	B0	K0	P0	P1	D0	E	F	W
TDFN 8L 2x2mm Green	2.3	2.3	1.05	4	4	1.55	1.75	3.5	8



Recommended Reflow Soldering Profile

Please see IPC/JEDEC J-STD-020: latest revision for reflow profile based on package volume of 3.00 mm³ (nominal). More information can be found at www.jedec.org.



Silego Website & Support

Silego Technology Website

Silego Technology provides online support via our website at <http://www.silego.com/>. This website is used as a means to make files and information easily available to customers.

For more information regarding Silego Green products, please visit:

<http://greenpak.silego.com/>
<http://greenpak2.silego.com/>
<http://greenfet.silego.com/>
<http://greenfet2.silego.com/>
<http://greenclk.silego.com/>

Products are also available for purchase directly from Silego at the Silego Online Store at <http://store.silego.com/>.

Silego Technical Support

Datasheets and errata, application notes and example designs, user guides, and hardware support documents and the latest software releases are available at the Silego website or can be requested directly at info@silego.com.

For specific GreenPAK design or applications questions and support please send email requests to GreenPAK@silego.com

Users of Silego products can receive assistance through several channels:

Online Live Support

Silego Technology has live video technical assistance and sales support available at <http://www.silego.com/>. Please ask our live web receptionist to schedule a 1 on 1 training session with one of our application engineers.

Contact Your Local Sales Representative

Customers can contact their local sales representative or field application engineer (FAE) for support. Local sales offices are also available to help customers. More information regarding your local representative is available at the Silego website or send a request to info@silego.com

Contact Silego Directly

Silego can be contacted directly via e-mail at info@silego.com or user submission form, located at the following URL: <http://support.silego.com/>

Other Information

The latest Silego Technology press releases, listing of seminars and events, listings of world wide Silego Technology offices and representatives are all available at <http://www.silego.com/>

THIS PRODUCT HAS BEEN DESIGNED AND QUALIFIED FOR THE CONSUMER MARKET. APPLICATIONS OR USES AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS ARE NOT AUTHORIZED. SILEGO TECHNOLOGY DOES NOT ASSUME ANY LIABILITY ARISING OUT OF SUCH APPLICATIONS OR USES OF ITS PRODUCTS. SILEGO TECHNOLOGY RESERVES THE RIGHT TO IMPROVE PRODUCT DESIGN, FUNCTIONS AND RELIABILITY WITHOUT NOTICE.