

STLUX™

Intelligent lighting made easy



Digital lighting management reveals new possibilities for high-power LED applications, paving the way to smart cities

Fully configurable lighting is the key to delivering the right amount of light where and when it is needed, with detection and dimming capabilities to save energy in outdoor lighting installations.

STLUX controllers enable excellent performance in terms of efficiency at full load as well as in idle condition. LED brightness can be controlled down to very low current levels with maximum precision thanks to digital calibration during production phase.

Communication interfaces allow remote control and interoperability with the smart grid, paving the way to smart cities.

KEY FEATURES & BENEFITS

- Up to 6 state machine event driven (SMEDs)-controlled PWMs providing full control of any power conversion stage
- Multiple topologies to develop applications with best-in-class efficiency
- Maximum precision dimming
- An integrated Digital Addressable Lighting Interface (DALI) ensures remote control and interoperability with sensors
- Embedded fault detector improves reliability

IDEAL FOR

- LED lighting in high-end, highly-configurable applications
- Smart lighting solutions



A COMPLETE ECOSYSTEM TO EASE YOUR DESIGN

Part Number	Package	SMED Outputs	ADC Gain	Supply Voltage range (V)	Hardware DALI	Comparator	FLASH Size (kB) (Prog)	Internal RAM Size (kB)	EEPROM Size (kB)	Operating Temperature (°C) range
STLUX385A	TSSOP 38	6	1/4x	3 - 5.5	Yes	4	32	2	1	-40 to +105°C
STLUX383A	TSSOP 38	6	1x							
STLUX325A	VFQFPN 32 5x5	5	1x							
STLUX285A	TSSOP28	4	1x							

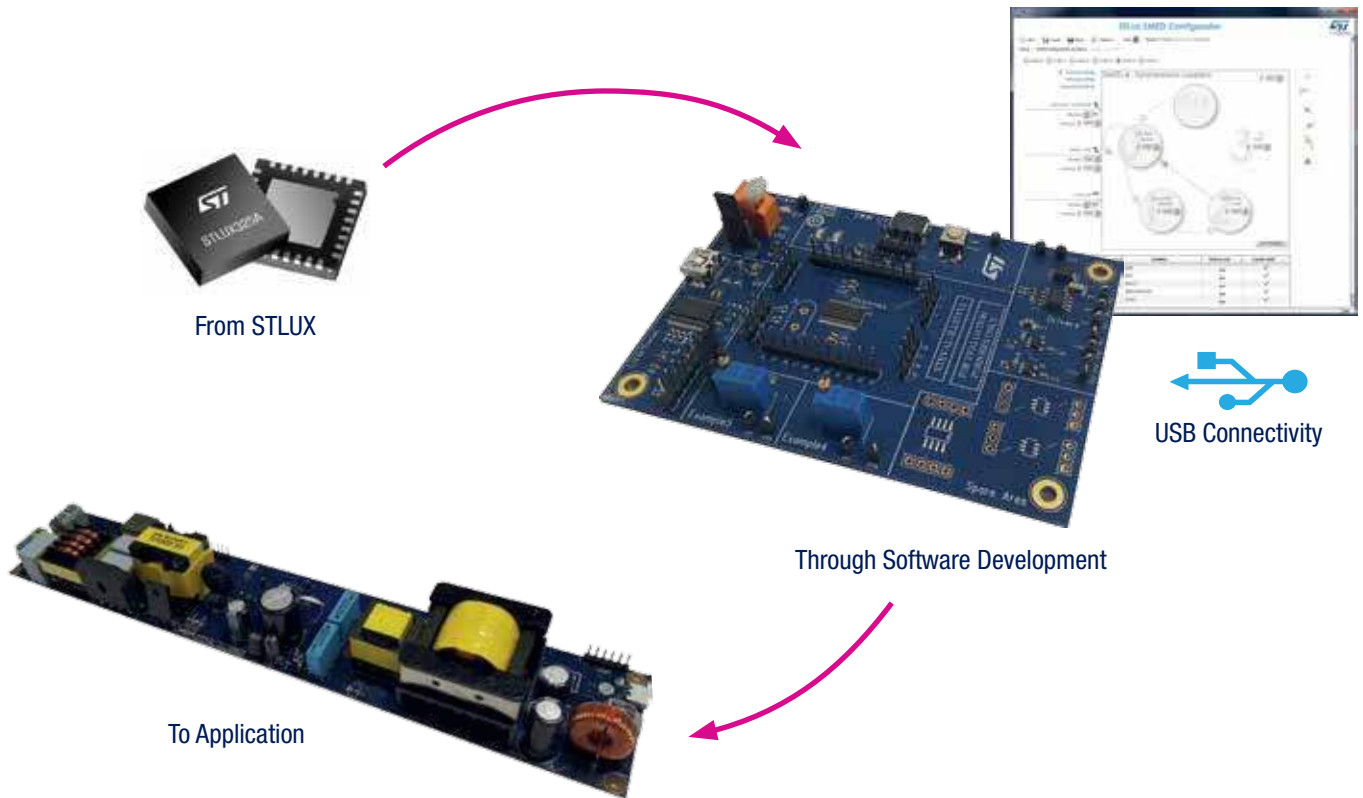
DEVELOPMENT ENVIRONMENT

Evaluation board	
STEVAL-ILL075V1	STLUX385A evaluation board
SOFTWARE TOOLS	
STSW-STLUXLIB02	STLUX and STNRG peripheral library
STSW-STLUXSMED02	STLUX and STNRG SMED configurator
SUPPORTED COMPILERS	
IAR Integrated development environment and optimized C compiler for STM8	

APPLICATION EXAMPLES

Boards	Description
STEVAL-ILH007V1	150 W HID digital ballast based on the STLUX385A
STEVAL-ILL066V1	100 W LED street lighting evaluation board using STLUX385A
STEVAL-ILL066V2*	100 W LED street lighting evaluation board using STLUX385A with DALI 2.0 support
STEVAL-ILL077V1	60 W, digital 3-LED channel with current regulation and dimming

* Coming soon



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