

ST LED Driver Guide



Signs & Messaging	Special Illumination	High Power – DC supply	High Power – Mains supply
<u>STP08xP05</u>	<u>STP04CM05</u>	<u>L497x</u>	<u>VIPer12A</u>
<u>STP16xP05</u>		<u>L597x</u>	<u>VIPer22A</u>
<u>STPIC6D595</u>		<u>L598x</u>	
		<u>L6920</u>	
		<u>L69xx</u>	

Signs & Messaging

Part No	Description	Vdd	Io
STP08CP05	8-bit C.C. LED driver with Thermal Shut-down	3.3 – 5.5V	5 - 100mA
STP16CP05	16-bit C.C. LED driver with Thermal Shut-down	3.3 – 5.5V	5 – 100mA
STP16CPS05	16-bit C.C. LED driver with Auto Power-Saving	3.3 – 5.5V	5 – 100mA
STP08DP05	8-bit C.C. LED driver with Diagnostic Feature	3.3 – 5.5V	5 – 100mA
STP16DP05	16-bit C.C. LED driver with Diagnostic Feature	3.3 – 5.5V	5 – 100mA
STPIC6D595	Power Logic 8-Bit Shift Register	5V	100mA Cont.

Special Illumination

Part No	Description	Vdd	Io
STP04CM05	4-bit C.C. PowerLED Driver	3.3 – 5.5V	80-400mA

High Power – DC Supply

Part No	Topology	Input Voltage Range	Maximum DC current	Max number of LEDs in series $V_F=3.5V$
L4973	Buck	8V to 55V	3.5A	15
L4976	Buck	8V to 55V	1A	9
L5970D & AD	Buck	4.4V to 36V	1A	9
L5973D	Buck	4.4V to 36V	2A	9
L5973AD	Buck	4.4V to 36V	1.5A	9
L6902D	Buck	8V to 36V	1A	9
L5980-1-2-5D	Buck	2.9V to 18V	0.7A to 2A	4
L6926	Buck	2 to 5.5V	0.8A	1
L6920	Boost	1 to 5.5V	1A	1

High Power – Mains Supply

Part No	Max number of LEDs in series @ 700mA $V_F=3.5V$	Max number of LEDs in series @ 1.05A $V_F=3.5V$	Max Output Power
VIPer12A	2	1	6W
VIPer22A	4	2	10W

Eval Boards & Reference Designs

Eval Board	Description	Core Products	Document
STEVAL-ILL001V1	Dimmable driver for HB Power LEDs	VIPer22A	AN2042
STEVAL-ILL002V4	40 LEDs Diagnostic Reference Board	STP08DP05	
STEVAL-ILL003V2	32 LEDs Array Reference Board	STP08/16Cx05	
STEVAL-ILL005V1	Constant current off-line driver for HB LED's	VIPer12A	AN1916
STEVAL-ILL006V1	Constant current off-line driver for HB LED's	VIPer22A	AN1916
STEVAL-ILL007V1	High Brightness LED driver	L5973D	AN2259
STEVAL-ILL008V1	High Brightness LED driver for Flashlight	L6920D	AN1941
STEVAL-ILL009V1	RGB Color Control board	STP04CM05	AN2531