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LIGHTING WORLD

LED Driver Product Catalogue

SILICON TOUCH TECHNOLOGY INC.



CONSTANT CURRENT LED DRIVER

Part No.	Name	Features and Applications	Package
DM114 DM115	8 Channel Constant Current LED Drivers (Upgrade of ST2221A)	<p>Application</p> <ul style="list-style-type: none"> ● LED Dot Matrix Display <p>Features</p> <ul style="list-style-type: none"> ● 8 Channel Outputs <ul style="list-style-type: none"> • DM114: 30~90mA per Channel • DM115: 5~60mA per Channel ● Output Current Matching <ul style="list-style-type: none"> • Bit-to-Bit: $\pm 4\%$ (Max) • Chip-to-Chip: $\pm 10\%$ (Max) ● Power Supply Voltage: 3.3V~5 V ● Maximun Output Voltage: 17 V 	DIP 16 SOP 16 SSOP 16
DM11C	8 Channel Constant Current LED Drivers (Upgrade of ST2221A)	<p>Application</p> <ul style="list-style-type: none"> ● LED Dot Matrix Display <p>Features</p> <ul style="list-style-type: none"> ● 8 Channel Outputs: 5mA~100mA Driving Capacity ● Output Current Matching <ul style="list-style-type: none"> • Bit-to-Bit: $\pm 3\%$ (Max) • Chip-to-Chip: $\pm 6\%$ (Max) ● Power Supply Voltage: 3.3V~5 V ● Maximun Output Voltage: 17 V ● Open/Short Detection 	DIP 16 SOP 16 SSOP 16
DM134 DM135 DM136	16 Channel Constant Current LED Driver (Upgrade of ST2221C)	<p>Application</p> <ul style="list-style-type: none"> ● LED Dot Matrix Display <p>Features</p> <ul style="list-style-type: none"> ● 16 Channel Outputs <ul style="list-style-type: none"> • DM134: 30~90mA per Channel • DM135: 5~50mA per Channel • DM136: 3~15mA per Channel ● Output Current Matching <ul style="list-style-type: none"> • Bit-to-Bit: $\pm 4\%$ (Max) • Chip-to-Chip: $\pm 10\%$ (Max) ● Power Supply Voltage: 5 V ● Maximun Output Voltage: 17 V 	DIP 24 SOP 24 SSOP 24 QFN 32



Part No.	Name	Features and Applications	Package
DM134B DM135B	16 Channel Constant Current LED Driver (Completely Compatible with DM134/135)	Application <ul style="list-style-type: none">● LED Dot Matrix Display Features <ul style="list-style-type: none">● 16 Channel Outputs<ul style="list-style-type: none">• DM134B: 30~90mA per Channel• DM135B: 5~50mA per Channel● Output Current Matching<ul style="list-style-type: none">• Bit-to-Bit: $\pm 4\%$ (Max)• Chip-to-Chip: $\pm 10\%$ (Max)● Power Supply Voltage: 3.3V~5 V● Maximum Output Voltage: 17V	DIP 24 SOP 24 SSOP 24 QFN 32
DM13C	16 Channel Constant Current LED Driver	Application <ul style="list-style-type: none">● LED Dot Matrix Display Features <ul style="list-style-type: none">● 16 Channel Outputs :5mA~90mA● Output Current Matching<ul style="list-style-type: none">• Bit-to-Bit: $\pm 3\%$ (Max)• Chip-to-Chip: $\pm 6\%$ (Max)● Power Supply Voltage: 3.3V~5 V● Maximum Output Voltage: 17V● Open/Short Detection	DIP 24 SOP 24 SSOP 24 QFN 32



PWM-CONTROLLED LED DRIVER

Part No.	Name	Features and Applications	Package
DM132	16 Channel PWM-Controlled Constant Current LED Driver (Upgrade of ST2226A)	Application <ul style="list-style-type: none">● LED Dot Matrix Display Features <ul style="list-style-type: none">● 16 Channel Output: 5~60 mA Driving Capability● 1024 PWM Grayscale Control● Improved Current Matching<ul style="list-style-type: none">• Bit-to-Bit: $\pm 6\%$• Chip-to-Chip: $\pm 10\%$● Maximum Output Voltage: 17 V● Improved User Interface for Easier Control	DIP 28 SOP 28 SSOP 28 QFN 32
DM163	8 * 3 Channel PWM Controlled Constant Current LED Driver	Application <ul style="list-style-type: none">● Full-Color LED Display● LED Decorative Lighting Features <ul style="list-style-type: none">● 3 Banks of 8 Channel Outputs: 5mA ~ 60mA Driving Capabilities● Current Matching<ul style="list-style-type: none">• Bit-to-Bit: $\pm 4\%$• Chip-to-Chip: $\pm 10\%$● (8+6) bit PWM for Grayscale Control and Dot Correction● Power Supply Voltage: 3.3V ~ 5V● Maximum Output Voltage: 17 V	QFP 44 QFN 40



LED ERROR DETECTION DRIVER

Part No.	Name	Features and Applications	Package
DM117	8 Channel Constant Current LED Driver with LED Fault Detection	<p>Application</p> <ul style="list-style-type: none"> ● Traffic related LED Dot Matrix Application <p>Features</p> <ul style="list-style-type: none"> ● 8 Channel Outputs: 5~100mA Driving Capability ● Power Supply Voltage : 3.3V ~ 5V ● Invisible LED Open/Short Detection ● Thermal Protection ● Fast Detecting Response: 0.1us 	DIP 20 SSOP 20
DM133	16 Channel Constant Current LED Driver with LED Fault Detection	<p>Application</p> <ul style="list-style-type: none"> ● Traffic related LED Dot Matrix Application ● Full-Color LED Display <p>Features</p> <ul style="list-style-type: none"> ● 16 Channel Outputs: 5~60mA driving capability ● LED Open Detection ● Thermal Alarm ● 6 Bits Current Adjustment for Global Brightness Control ● Power Supply Voltage : 3.3V ~ 5V 	HSOP 28 SSOP 28 QFN 32
DM137	16 Channel Constant Current LED Driver with LED Fault Detection	<p>Application</p> <ul style="list-style-type: none"> ● Traffic related LED Dot Matrix Application <p>Features</p> <ul style="list-style-type: none"> ● 16 Channel Outputs: 5~90mA Driving Capability ● Power Supply Voltage : 3.3V ~ 5V ● Invisible LED Open/Short Detection ● Thermal Protection ● Fast Detecting Response: 0.1us 	HSOP 28 SSOP 28



SPECIAL PURPOSE LED DRIVER

Part No.	Name	Features and Applications	Package
ST2225A	35 Channel Alphanumeric LED Driver	Application <ul style="list-style-type: none">● Applied to Industry Control Indicator, Relay Driver, Digital Clock, etc. Features <ul style="list-style-type: none">● 35 outputs, 20 mA capability● Continuous Brightness Control● Serial Data Input● No Load Signal Required for Data Latch● Wide Power Supply Operation: 4.75 V ~ 11 V● TTL Compatibility	Bare Chip SSOP-48



LED DRIVER FOR DECORATIVE LIGHTING

Part No.	Name	Features and Applications	Package
DM413	3 Channel Constant Current LED drive	Application <ul style="list-style-type: none">● LED Decorative Lighting● PWM Signal Generator for Lighting Applications Features <ul style="list-style-type: none">● 3 Channel Outputs with 5mA~100mA Driving Capabilities● 14-bit PWM Grayscale Control● Built-in 6.5MHz Oscillator● Power Supply Voltage: 3.3V~5V	SOP 16 SSOP 16

Part No.	Name	Features and Applications	Package
DD231	3-Channel Constant Current LED Driver	Application <ul style="list-style-type: none">● LED Decorative Lighting Features <ul style="list-style-type: none">● Current Matching:<ul style="list-style-type: none">• Bit-to-Bit: $\pm 4\%$ (Max)• Chip-to-Chip: $\pm 10\%$ (Max)● Driving Capabilities: 5mA~30mA	SOT26
DD233	4-Channel Constant Current LED Driver	Application <ul style="list-style-type: none">● LED Decorative Lighting Features <ul style="list-style-type: none">● Current Matching:<ul style="list-style-type: none">• Bit-to-Bit: $\pm 4\%$ (Max)• Chip-to-Chip: $\pm 10\%$ (Max)● Driving Capabilities: 5mA~30mA	MSOP8 SOP8



HIGH POWER LED DRIVER

Part No.	Name	Features and Applications	Package
DD212	High Current Double Charge Pump Driver IC	<p>Application</p> <ul style="list-style-type: none">● High Power LED Related Application <p>Features</p> <ul style="list-style-type: none">● Output Current=400mA @3.0V● Low Supply Voltage 2.0~5.5V● Only One External Component, a Capacitor Needed	SOT-25
DD311	High Power Constant Current LED Driver	<p>Application</p> <ul style="list-style-type: none">● High Power LED Related Application <p>Features</p> <ul style="list-style-type: none">● Constant Output Current: 1.0A (Max.)● Maximum Output Voltage: 33V● Enable Frequency: 1MHz	TO-252
DD312	High Power Constant Current LED Driver	<p>Application</p> <ul style="list-style-type: none">● High Power LED Related Application <p>Features</p> <ul style="list-style-type: none">● Constant Output Current: 1.0A (Max)● Maximum Output Voltage: 17V● Enable Frequency: 1MHz● Built-in Protection Circuitry	SOP-8 TO-252



Part No.	Name	Features and Applications	Package
DD313	3-Channel High Power LED Driver	<p>Application</p> <ul style="list-style-type: none">● High Power LED Related Application <p>Features</p> <ul style="list-style-type: none">● RGB 3-Channel Constant Output Current: 500mA (Max)● Maximum Output Voltage: 17V● Enable Frequency: 1MHz● Built-in Protection Circuitry	TO-252



BOOST/CHARGE-PUMP DRIVER

Part No.	Name	Features and Applications	Package
DD211	Double Charge Pump Driver IC	<p>Application</p> <ul style="list-style-type: none"> ● Battery powered LED Torch, Backlight, Alarm, etc. <p>Features</p> <ul style="list-style-type: none"> ● Output Current=32.5mA when Vf=3.5V ● Low Supply Voltage 2.0~3.3V ● Only One External Component, a Capacitor Needed ● Low Quiescent Supply Current ● Built-in Resistor to Limit the Output Current 	SOT-25
DD212	High Current Double Charge Pump Driver IC	<p>Application</p> <ul style="list-style-type: none"> ● Battery powered LED Torch, Backlight, Alarm, etc. <p>Features</p> <ul style="list-style-type: none"> ● Output Current=400mA @3.0V ● Low Supply Voltage 2.0~5.5V ● Only One External Component, a Capacitor Needed 	SOT-25
PC112	Step Up Converter for White LED Driver	<p>Application</p> <ul style="list-style-type: none"> ● LED Backlight for LCD <p>Features</p> <ul style="list-style-type: none"> ● Efficiency: 85% (typ.) ● Current Matching: $\pm 4\%$ (Max) ● No External Power Switch ● Low Shutdown Supply Current ● Capable of Driving Up to 6 White LEDs at 20mA and 2.0V Supply Voltage 	SOT23-5



Part No.	Name	Features and Applications	Package
PC113	Step Up Converter for White LED Driver	Application <ul style="list-style-type: none">● LED Backlight for LCD Features <ul style="list-style-type: none">● Efficiency: 85% (typ.)● Current Matching: $\pm 4\%$ (Max)● No External Power Switch● Low Shutdown Supply Current● Capable of Driving Up to 6 White LEDs at 20mA and 2.0V Supply Voltage● Over Voltage Protection	SOT23-6