### Full Color LED Controller Driver with PWM Control

#### GENERAL DESCRIPTION

The NJU6061 is an RGB LED driver with PWM control. It contains PWM (pulse width modulation) controller, LED drivers, 8-bit serial interface, etc. Each of the R (red), G (green) and B (blue) outputs produces 128 levels individually so that the RGB LED emits full color. It features a programmable sweep function, which can changes LED color smoothly reducing CPU load.

It requires only four external components such as three resistors for LED current adjustment and the one for oscillation, which enables the NJU6061 to save PCB space. The NJU6061 is suited for a large number of applications such as cellular phones, car stereo sets, household appliances, illumination equipment, etc.

### FEATURES

- Controls the 3-color LED Separately (ILED=30mA x 3 outputs)
- Built-in PWM Luminance Control (128 steps x 3)
- Built-in 8bit serial Interface Circuit
- Sweep Programming Function
- Built-in Oscillation Circuit
- **Operating Voltage for Step-up Circuits**
- Package

: 2.4V to 5.5V : FFP12(2.0\*2.0\*0.85±0.15mm)

- CMOS Technology

PACKAGE OUTLINE

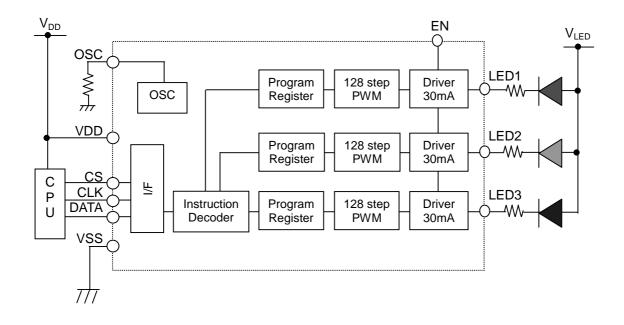


NJU6061P

## NJU6061

# Preliminary

### BLOCK DIAGRAM



### ■ PIN DESCRIPTIONS

No.	PIN NAME	TYPE	DESCRIPTIONS
	V <sub>DD</sub>	Power	V <sub>DD</sub> Power Supply terminal
	RSTb	Input	Reset terminal - Active "L".
	CSb	Input	Chip Select terminal The serial data is fixed on the rising edge of CSb clock.
	CLK	Input	Shift Clock terminal
	DATA	Input	Serial Data terminal
	OSC	Input	Oscillating terminal External resistor connecting
	V <sub>SS</sub>	Power	Ground terminal
	EN	Input	Output Enable terminal
	LED1	Output	LED Connect terminals (Open drain output)
	LED2	Output	Output level are 32 steps PWM by instruction control. Connecting cathode of LED.
	LED3	Output	

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