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L99VR02J

Automotive Voltage Regulator

SPS Macro Division

May 2023

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Every story starts somewhere ...



Would you like to have a standardized and simplified design for your voltage regulators needs?

L99VR0xx automotive voltage regulators

“We are pleased to introduce:

L99VR0xx
A Voltage Regulators family covering multiple customer needs

L99VR01S/J

- Single configurable output
- 200mA current capability
- Plastic and exposed pads package option

L99VR02J

- Single configurable output
- 500mA current capability
- Exposed pads package

L99VR02XP

- Double configurable output
- 250mA current capability for each output
- Exposed pads package

“What makes us different?”



Design standardization

One configurable device from 0.8V to 5V serving multiple application needs with single part number



Family approach

Simplifying supply chain and taking benefit of cumulated higher volume on single part number



Safety requirement

ISO 26262 available upon customer request

0.8 V

1.2 V

1.5 V

1.8 V

2.2 V

2.5 V

3.3 V




5.0 V

L99VR02J applications & key benefits

Value proposition



“Thanks to the selectable fixed output voltage from 0.8 V to 5.0 V, the same device fully compliant with automotive requirements, can be used for several electronic applications, simplifying the design”

Automotive

-  Navigation systems
-  MCU supplies
-  Audio systems
-  Powertrain systems
-  Automotive display drivers
-  Sensors (e.g. camera sensor)



Industrial

-  Industrial automation
-  Industrial instrumentation
-  Building automation
-  Portable electronic applications
-  Battery-powered instruments
-  Medical & healthcare



L99VR02J automotive voltage regulators

L99VR01S

Configurable for 8 fixed Vo	Io = 200 mA
Enable	Reset

L99VR01J

Configurable for 8 fixed Vo	Io = 200 mA
Enable	Reset
Adv. thermal warning	Ishort control
Watchdog	

L99VR02XP

Configurable for 8 fixed Vo	LDO1 Io = 250 mA
Configurable for 8 fixed Vo	LDO2 Io = 250 mA
Enable	Reset
Adv. thermal warning	Ishort control
Watchdog	Thermal clusters

L99VR02J

Configurable for 8 fixed Vo	Io = 500 mA
Enable	Reset
Adv. thermal warning	Ishort control
Watchdog	



L99VR0xx automotive voltage regulators

“ Family approach means ... Benefits including improved qualification times, delivery support and pricing

Simple part numbering



No more long lists of different products:
A single L99VR instead of 8 different devices
with complex markings

One qualified P/N instead of 8 different
device qualifications

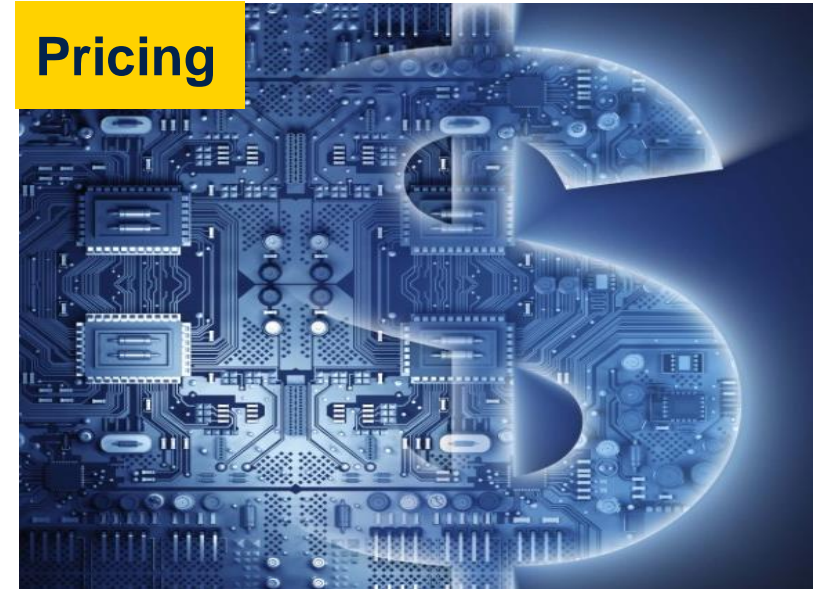
Delivery



Whichever output voltage you choose, it is
the same silicon line, same package, same
testing and same part number for us

A single device, covering different application
needs, mitigates potential delivery issues

Pricing



Thanks to a single part number covering 8
different outputs needs,
a “Family price” is achieved

Economy of scale helps to achieve
competitive pricing

L99VR02J applications & solutions

Automotive



Front Light System supplied with 5 V



Keyless System supplied with 3.3 V



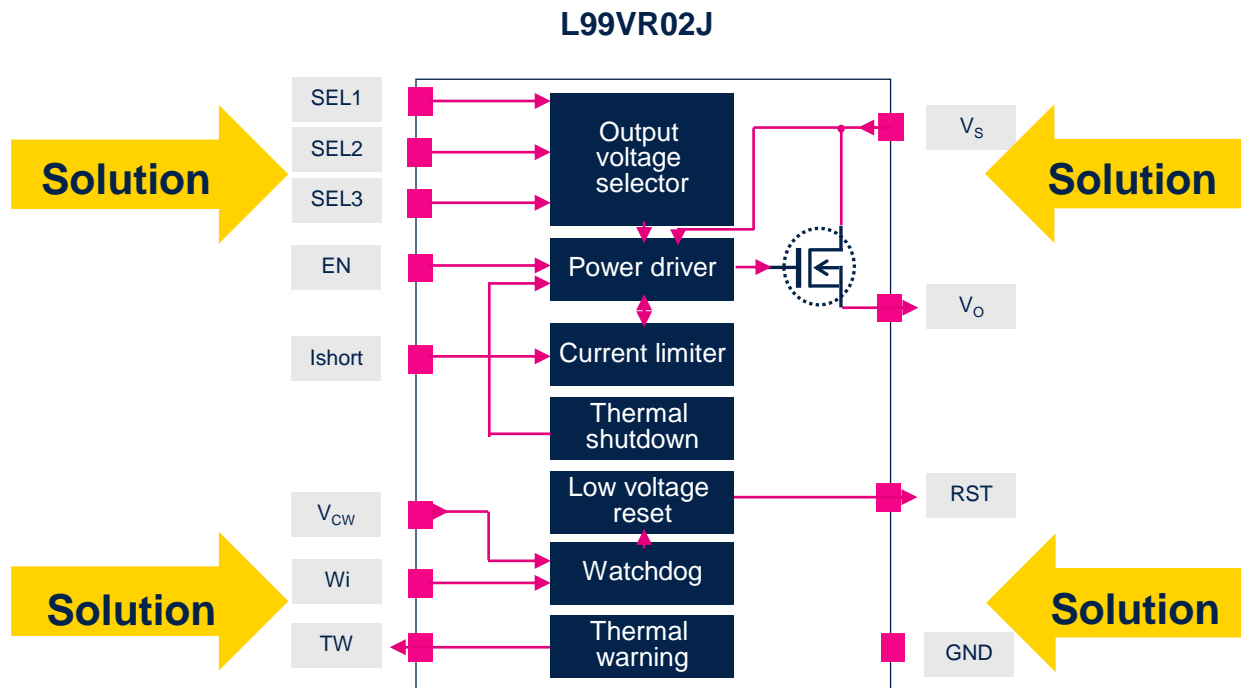
Industrial



Building Automation supplied with 1.8 V



Medical Instrumentation
supplied with 2.8 V



Several applications...only one Solution!!!

Thank you

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