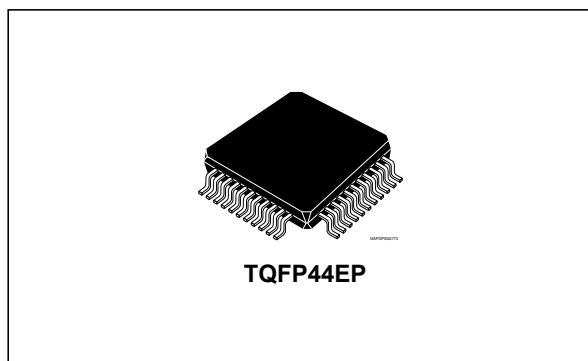


12 V Vehicle network conform car alternator regulator IC

Data brief



Features

- System in package smart power alternator regulator and 8-bit microcontroller (non-monolithic approach)
- Protected high/low side field pre-driver for external MOS
- Field short circuit protection
- Regulated voltage driven by ECU (programmable protocol driven)
- Regulated voltage thermally compensated (without protocol)
- Lamp driver (wake up and warning detection)

- 12 V Systems
- Self start function
- Load response control (LRC)
- Field monitor (FM) output
- Thermal shutdown
- Package TQFP44EP 10x10

Description

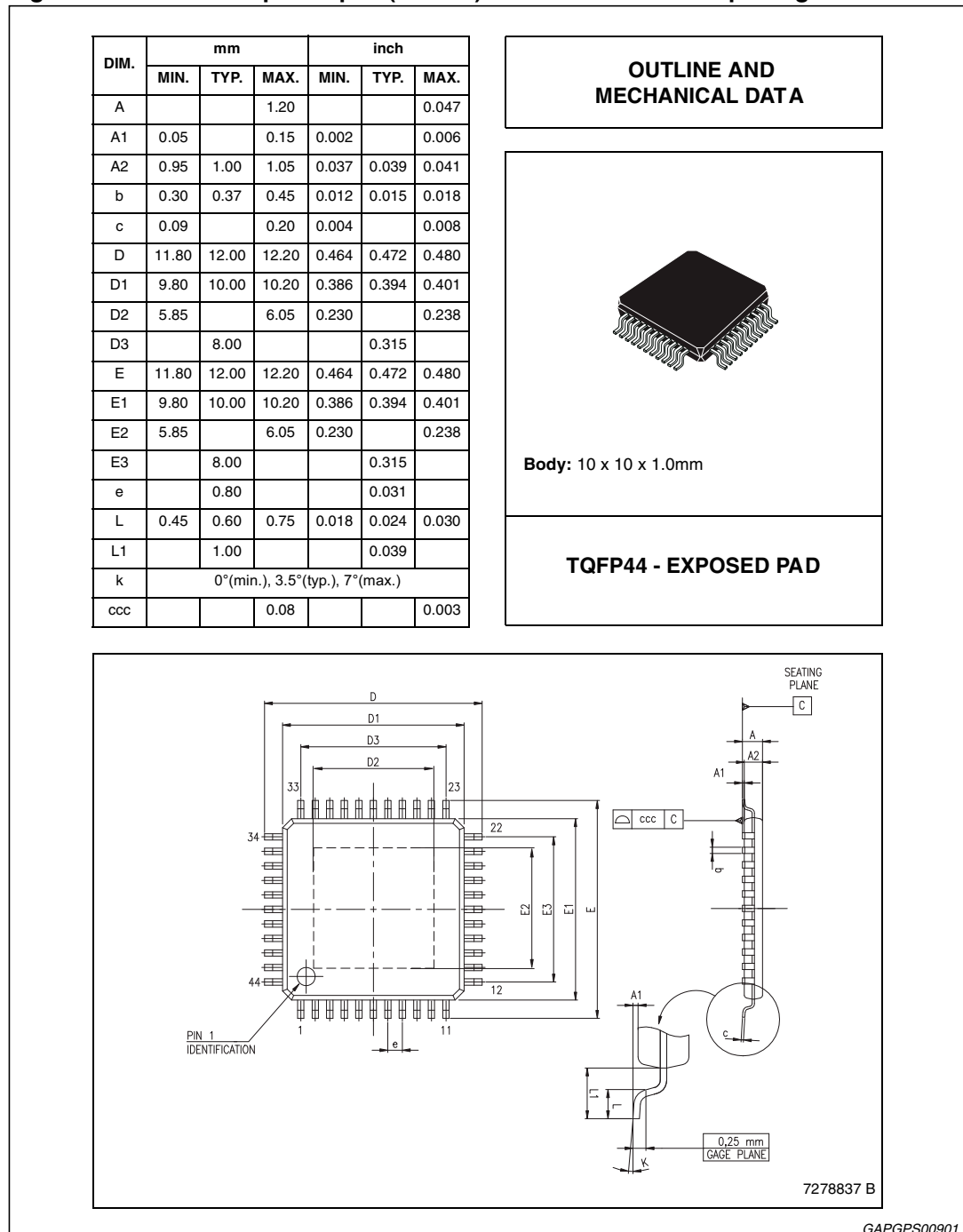
The L9912 is a controlled multifunctional alternator regulator intended to be used for commercial and agricultural vehicles. It supports 12 V System. The control can be achieved through different communication protocol: RCV, PCM, C_term, BSS. It is a System In Package solution with smart power alternator regulator IC and 8-bit microcontroller (non-monolithic approach). It includes the control section, fault diagnostic circuit which drives a warning lamp, and the protection against short circuits.

This device regulates in close loop the output of an automotive generator by controlling the field winding current by means of a Pulse-Width Modulation (PWM) of an external high side or low side driver at fixed frequency.

2 Package information

In order to meet environmental requirements, ST offers these devices in different grades of ECOPACK® packages, depending on their level of environmental compliance. ECOPACK® specifications, grade definitions and product status are available at: www.st.com. ECOPACK® is an ST trademark.

Figure 3. TQFP44 exposed pad (10 x 10) mechanical data and package dimensions



3 Order codes

Table 1. Device summary

Order code	Package	Packing
L9912	TQFP44EP	Tube
L9912TR	TQFP44EP	Tape & Reel

For order go to:



<http://www.ebv.com/chips>

4 Revision history

Table 2. Document revision history

Date	Revision	Changes
12-Sep-2014	1	Initial release.
30-Oct-2014	2	Changed title in cover page.

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