



The CC770 CAN controller from Bosch can directly replace Intel's AN82527 for spare parts and further development

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- ▶ With the CC770 Bosch is offering a high level of equivalence to the AN82527
- ▶ Direct exchange possible; compatible in both pins and functions

In the CC770 CAN controller, Bosch is adding a substitute for Intel's AN82527 CAN controller to the company's range. The device has a high level of structural equivalence to the Intel chip. When, as announced, Intel stops accepting orders for the AN82527 after December 2006 – and ceases production after the end of 2007 – the CC770 will remain available beyond these dates to cover the need for spare parts and for the purposes of further development. CAN (Controller Area Network) controllers in vehicles control the flow of data between electronic control units over the serial CAN bus. They are fitted to a very large number of vehicles, and must, as an automobile-specific spare part, remain available over a long period.

The CC770 is compatible in both pins and functions with the overwhelming majority of all AN82527 applications. No other CAN controller offers such high compatibility with the AN82527 as the Bosch IC. Both integrated circuits are available in PLCC44 packages. Intel permits surface mounting (SMD) in the QFP44 housing, while Bosch offers the lower-profile LQFP44 housing.

The most important condition for direct exchange is that the AN82527 must access the CAN bus through an external bus driver in the application concerned. This is true for the majority of applications. Only a few early circuits designed with the AN82527 use the controller's internal bus driver, as external drivers were not available at that early time. Direct exchange is not possible in such applications.

Having been developed significantly later, the CC770 incorporates a number of structural improvements over the Intel controller, and these can be

helpful in further development projects. It is, for instance, no longer necessary to fear data corruption during fast reads, as described by Intel for the AN82527 in a specification update (document 272876-001, dated August 1996). The new "silent" mode is also advantageous. This allows developers – typically when fault finding – to observe the CAN bus traffic without having to add an extra bus node just for this purpose.

Details of the compatibility between the CC770 and the AN82527 are described on the website at www.bosch-semiconductors.com.

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Additional information can be accessed at www.bosch.com.