

TwinCAT/BSD: New operating system
for Beckhoff Industrial PCs

Multi-core-capable, Unix-compatible operating system for TwinCAT 3 real-time applications

TwinCAT/BSD provides an alternative operating system for all of the latest Beckhoff Industrial PC platforms. TwinCAT/BSD combines the TwinCAT runtime with FreeBSD, an industrial proven and reliable open source operating system. FreeBSD is Unix-compatible and is continually being developed further, improved and optimized as an open source project by a large group of developers. The system – and thus also TwinCAT/BSD – supports both 32- and 64-bit platforms and makes scalable systems possible in a wide range of CPUs from ARM to Intel® Xeon® CPUs.

The current minimum size of a basic image is around 300 MB, with a very small RAM consumption of less than 100 MB. Therefore, very compact controllers can be realized with TwinCAT/BSD and all TwinCAT 3 runtime functions can be used. The programming is still carried out on a Windows development computer and with TwinCAT 3 XAE integrated in Visual Studio®.



TwinCAT/BSD is designed as a successor to Windows CE for Beckhoff Industrial PCs, but is also suitable in many applications as an alternative to the more complex Windows 7 and 10 operating systems.

TC/BSD



The new TwinCAT/BSD operating system offers multi-core support, making it possible to reserve individual cores exclusively for TwinCAT if required. In addition to a large number of FreeBSD and Linux programs, TwinCAT functions can also be installed via the Beckhoff Package Server. Moreover, uncomplicated updates of the operating system and the TwinCAT runtime are possible in this way via the network.

More information:

www.beckhoff.com/twincat-bsd