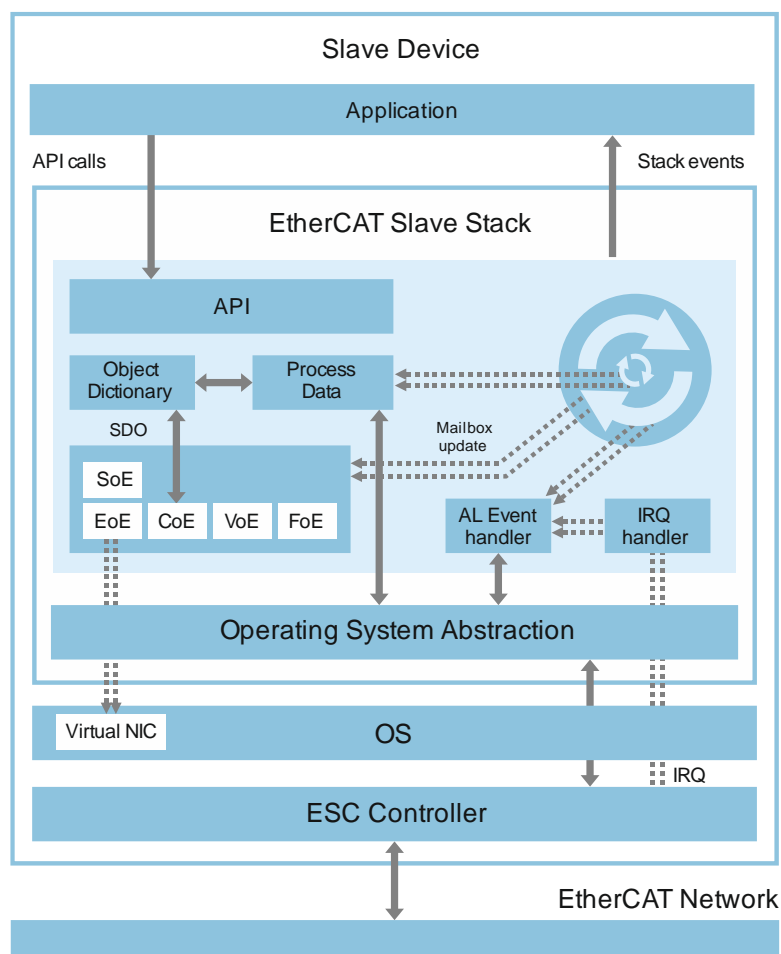


KPA EtherCAT Slave Stack is a software stack designed to run on microcontrollers, CPUs or DSPs with or without any Operating System (OS). It is provided either as a source code or as a compiled library.

Key Features

- Verified with EtherCAT Conformance Test Tool (CTT)
- Code written in "ANSI C"
- Small footprint for 8- and 16 Bit- microcontrollers:
 - SAB 80x16x (Infineon)
 - ARM 3 – 9, ATmega128 (Atmel)
 - PPC 52xx, MPC8536 (Freescale)
 - Microblaze (Xilinx)
 - Sitara AM335x with integrated ESC in PRUs (TI), C2000 (TI)
- RAM size depends on size of Object Dictionary (OD): for static OD \geq 3 KB Basic (8 KB Standard)
- ROM (flash) \geq 55 KB Basic (64 KB Standard)



Interfaces

- Compatible with various EtherCAT Slave Controllers (ESC), including Beckhoff (ASIC, IP core) and TI (PRU)
- IRQ handling of hardware events
- Polling of Mailbox (MBx) and Process / Service Data
- Operating System-based or OS-less
- Hardware Abstraction Layer instead of separate "defines"

Standard Class bundle

- Mailbox protocols: CoE, EoE, FoE, SoE, VoE
- Runtime generation / changing of Object Dictionary (OD)
- Adapted to operating system by using Operating System Abstraction Layer (OSAL)
- Virtual Ethernet card support for EoE (depending on OS)

Basic Class bundle

- Mailbox protocol: CoE
- Static Object Dictionary with pointer given from application
- With / without Interrupt Service Routines (ISR)