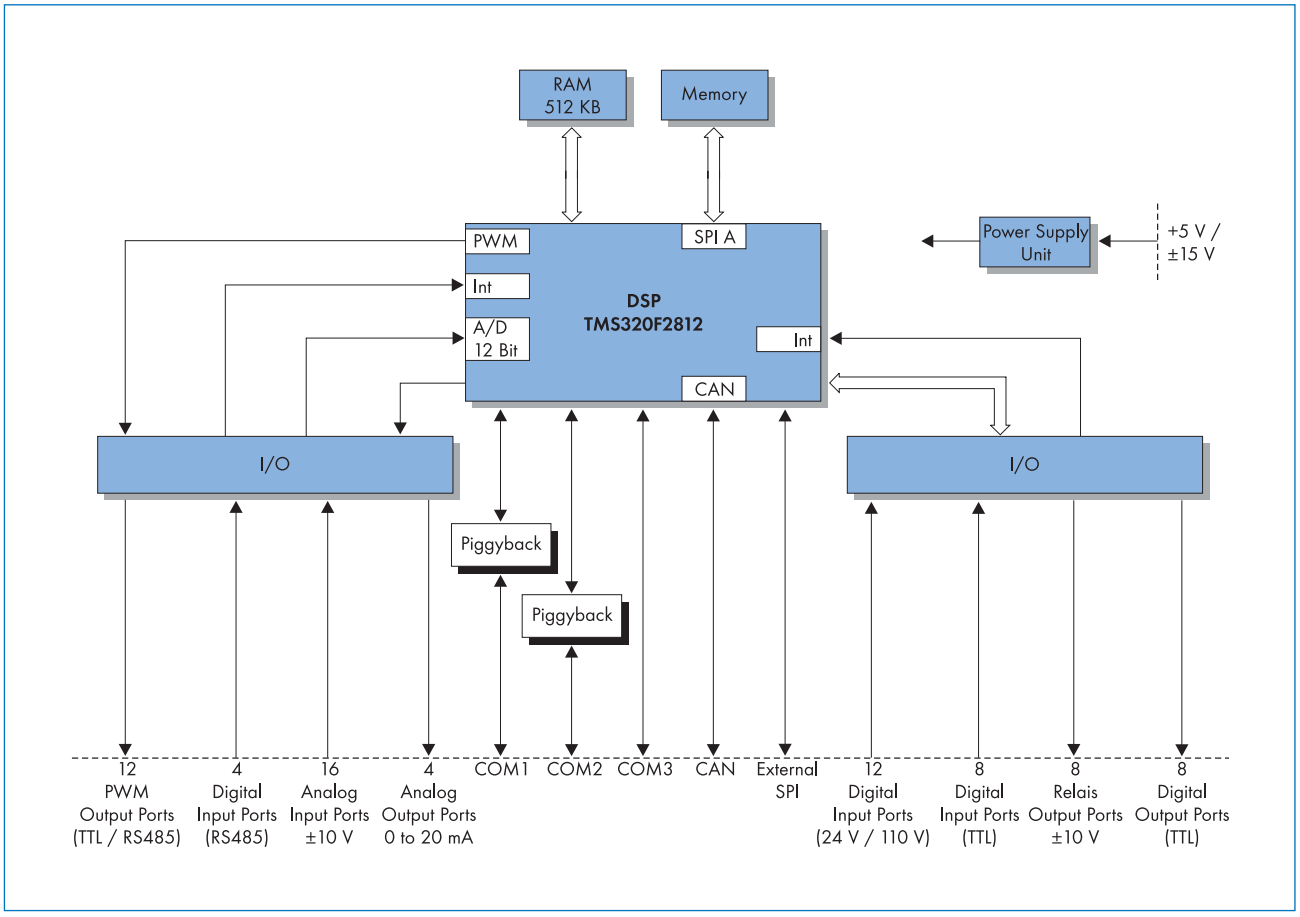
Universal Control Module

The UNICON DSP is a board with a digital signal processor that is used for signal processing and control, for example in converters. The UNICON DSP has everything needed for applications with the highest demands in control and regulation: Performance and reliability – even in the harshest of industrial environments.

- TMS320F2812 (150 MHz)
- 3 COM ports
- CAN interface
- 12 PWM output ports
- 24 digital input ports, 8 digital output ports
- 16 analog input ports, 4 analog output ports



Technical Data

CPU Core:
- signal processor DSP TMS320F2812
- data width 16 Bit external / 32 Bit internal
- clock frequency 150 MHz
- internal memory (on chip) 4 KByte 16 Bit One Time PROM
- external memory (on board) 32 KByte ser. Boot-(EE)PROM one time PROM
- 128 KByte serial param. EEPROM
- 64 KByte serial error FRAM
- 256 KByte 16 Bit parallel Flash

Main Memory:
SRAM 512 kByte

Interfaces:
- two serial interfaces, standard definable via piggyback
- one serial interface RXD/TXD
- one CAN interface, ISO 11898 compatible

Digital Input Ports:
- 12 Channels 3 electrically separated groups of 4 channels each
- 8 Channels TTL, therefrom 2 channels interrupt capable
- 4 Channels RS485

Digital Output Ports:
- 8 Channels TTL (Push - Pull)
- 2 Channels Transistor Outputs via optocoupler

Relais Output Ports:
- 8 Outputs

Analog Input Ports:
- 10 Channels, voltage inputs ±10 V differential
- 5 Channels, resistors inputs
- 1 Channel, PT100, 12 Bit converter

Analog Electric Current Outputs:
- 4 Channels

PWM Outputs:
- 12 Channels duty factor 0 % to 100 %

Additional Features:
via external power supply unit +5 V ±5 %; typ. 1.3 A
±15 V ±5 %; each typ. 0.2 A
plus piggybacks

Ambient Temperature:
–40 °C to +70 °C

Size:
275 mm x 175 mm