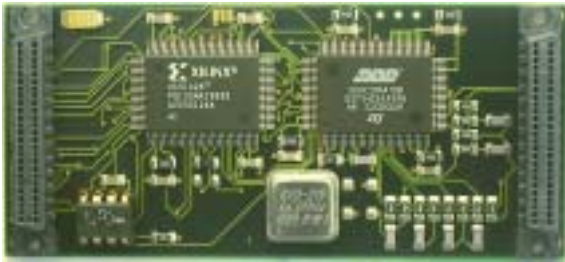


## TIP812 SERCOS Controller

### Application Information

The TIP812 is an IndustryPack® compatible module with a complete SERCOS bus interface using the SERCOS interface controller SERCON410 and two encoder interfaces (X4 quadrature inputs, 8 bit encoder counters) to support hand wheel functionality.



For the SERCON410 the TIP812-20 supports both physical interfaces, RS485 and optical fiber. The physical interfaces are located on the TIP812-TM-20 or TIP812-TM-21 Transition Module which is required for the TIP812-20.

The interfaces for the two encoder counters on the TIP812-20 support RS422 or TTL encoder signals. The RS422 / TTL physical interface is located on the TIP812-TM-20 Transition Module. An optical isolated RS422 physical interface is available with the TIP812-TM-21 Transition Module.

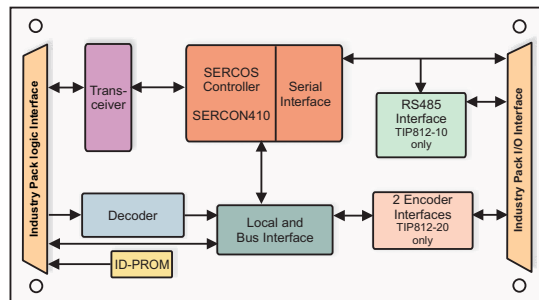


For First-Time-Buyers the engineering documentation TIP812-ED is recommended. The engineering documentation includes TIP812-DOC, schematics and data sheets.

Driver support (TIP812-SW-xx) for different operating systems is available.

### Technical Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- SERCOS interface based on SERCON410 chip
  - Single Chip Controller for SERCOS interface
  - Dual Port RAM 1024 words x 16 bit
  - Transmission rate up to 4 MBaud with internal clock recovery
  - Internal repeater for ring connections
  - Full duplex operation
  - 2 Encoder Interfaces to support hand wheels on TIP812-20
- Physical Interface
  - RS485 on board ( TIP812-10 only )
  - Optical fiber ring off board by additional transition module TIP812-TM-10 for TIP812-10 and TIP812-TM-20/21 for TIP812-20



### Order Information

|                      |  |
|----------------------|--|
| <b>TIP812-10</b>     | SERCOS-Controller                              |
| <b>TIP812-20</b>     | SERCOS-Controller with 2 Encoder Interfaces    |
| <b>TIP812-TM-10</b>  | Transition Module for Optical Fiber Ring       |
| <b>TIP812-TM-20</b>  | Transition Module for Optical Fiber Ring       |
| <b>TIP812-TM-21</b>  | As TIP812-20 but isolated encoder Interfaces   |
| <b>TIP812-DOC-10</b> | User Documentation for TIP812-10               |
| <b>TIP812-DOC-20</b> | User Documentation for TIP812-20               |
| <b>TIP812-ED</b>     | Engineering Documentation, includes TIP812-DOC |
| <b>TIP812-SW-12</b>  | OS-9 Software Support                          |
| <b>TIP812-SW-32</b>  | pSOS Software Support                          |
| <b>TIP812-SW-42</b>  | VxWorks Software Support                       |
| <b>TIP812-SW-62</b>  | Windows NT 4.0 Software Support                |
| <b>TIP812-SW-72</b>  | LynxOS Software Support                        |
| <b>TIP812-SW-82</b>  | LiNux Software Support                         |
| <b>TIP812-SW-92</b>  | QNX 4 Software Support                         |
| <b>TIP812-SW-95</b>  | QNX 6 Software Support                         |