

---

**PCM FRAME ALIGNER**

---

**DESCRIPTION**

The SA9101 is a direct replacement for Siemens PEB2035 (ACFA B) when used in PCM30 mode. Developed in conjunction with users of the PEB2035 it not only emulates the Siemens' device (PCM30 mode), but also offers a number of extended features.

**Features**

- Frame alignment/synthesis for PCM30 double frame and CRC-multiframe format
- Meets CCITT Rec.G704
- Interface to route selectable between HDB3 and fibre optical
- HDB3 outputs switchable between fully banded and half banded format
- Error checking via CRC4 procedure
- Insertion and extraction of alarms and facility signals
- Error counters for code errors (switchable to "S, zeros counter"), frame errors and CRC4 errors
- Sub-multiframe assigned CRC Error indication with possibility of automatic insertion in Si-bit position of outgoing multiframe
- Simplified data transfer between SA9101 and controller, supported by data stacks for receive and transmit signalling data, selectable interrupt-sources and DMA facilities
- Selectable interface mode (2048/4096 kBits/sec) to system internal highway
- Selectable system - clock (4096 kHz/8192 kHz)
- Programmable offsets for receive and transmit data
- Two frame receive buffer for receive route clock wander and jitter compensation
- Slip detection and direction indication
- Extended HDB3 error detection
- Double frame marker for serial data extraction support
- Repeated transmission of signalling data, if not updated
- Three transparent modes for timeslot 0 in transmit direction
- Transparent mode for receive direction
- HDB3 error indication/Parity checks
- Idle channel data insertion selectable for any timeslot
- Channel loopback capabilities, test and diagnostic capabilities

PACKAGE:	DIP/DIC40, PLCC44
EQUIVALENT DEVICES:	PEB2035(PCM30 MODE ONLY)
STATUS:	Production
SAMPLES:	Available