PRODUCT DATA SHEET

The Synchronous/Asynchronous Communications Controller, in conjunction with Wang software, adds a wide range of data communications capabilities to the 2200 Series product line. The controller has its own microprocessor, read only memory, and random access memory (with multi-character input and output buffers). The controller and a 2200 Series central processor, therefore, can concurrently perform separate tasks related to data transmission and reception.

MODELS
The Synchronous/Asynchronous Communications Controller is available in several functionally equivalent versions (called models or options) to accommodate differences among the 2200 Series products. Model 2228B or 2228C can be used with the 2200VP, LVP, or MVP central processor; Option 28B or 28C can be used with the 2200SVP central processor.

SOFTWARE
Wang emulation software is available for various synchronous and asynchronous protocols. The emulation software program modules define the communications functions executed by the central processor, including the automatic loading of emulation microcode. Only Wang Laboratories produces the synchronous communications emulation microcode and program modules for the Synchronous/Asynchronous Communications Controller. Because asynchronous protocols are inherently less complex than synchronous protocols, the controller’s firmware includes generalized microcode to support either Wang or user-programmed asynchronous software. The *Synchronous/Asynchronous Communications Controller User Manual* (700-4670), provided with the controller, describes these user-programmable asynchronous features.

SYNCHRONOUS/ASYNCHRONOUS COMMUNICATIONS CONTROLLER MODELS 2228B AND 2228C OPTIONS 28B AND 28C

- RS-232-C/CCITT V.24 compatible
- Supports Wang synchronous communications software
- Supports Wang or user-programmed asynchronous communications software
- Supports file and document transfer between a 2200 Series system and another Wang system

**SYSTEM COMPATIBILITY**

<table>
<thead>
<tr>
<th>Communications Controller</th>
<th>Central Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 2228B or 2228C</td>
<td>2200VP, LVP, or MVP</td>
</tr>
<tr>
<td>Option 28B or 28C</td>
<td>2200SVP</td>
</tr>
</tbody>
</table>

Wang Laboratories, Inc.
One Industrial Avenue, Lowell, MA 01851, Tel. (617) 459-5000, TWX 710-343-6769, Telex 94-7421
The Wang BSC 1 software emulates the Binary Synchronous Communications (BSC) protocol of IBM 2780, 3780, and 3741 terminals, as well as HASP multileaving workstations. The software also supports communications between two Wang 2200 Series systems if each is equipped with one of the communications controllers described in this data sheet. Furthermore, the software and controllers support document interchange between a 2200 system and a Wang Word Processing System, Office Information System, or VS/Integrated Information System. Document exchange between systems is achieved using the Wang WPS protocol, a modification of the binary synchronous protocol.

The Model 2228C and Option 28C versions of the communications controller also support the Wang 3275 BSC emulation software.

The Burroughs Emulation software, a multipoint poll/select protocol, supports synchronous or asynchronous message- or transaction-oriented communications with a host computer.

Wang software emulating the widely used Teletype® (TTY) protocol and the IBM 2741 Selectric® Typewriter Terminal protocol is available for interactive asynchronous communications with a terminal or a host computer. The asynchronous capabilities of the Synchronous/Asynchronous Communications Controller support Wang Remote Control and Maintenance (RCM) software.

For more information about a particular software package, request a copy of the 2200 data sheet describing that emulation.

**MODEM CONNECTOR**

The Synchronous/Asynchronous Communications Controller is a Data Terminal Equipment (DTE) interface, compatible with any RS-232-C/CCITT V.24 Data Communications Equipment (DCE) interface. The 25-pin female connector attached to the communications controller accepts an RS-232-C/CCITT V.24 cable leading to a modem. The modem must be compatible with both the communications software and any modem used at the other end of a communications line.

**SPECIFICATIONS**

**Model Numbers**
- 2228B Communications Controller
- 2228C Communications Controller
- OP28B Communications Controller
- OP28C Communications Controller

**Power Requirements**
- Power is supplied by the central processor.

**Electrical Connection**
- 25-pin RS-232-C/CCITT V.24 compatible connector

**Cable**
- A 12-foot (3.6-meter) cable is supplied; it is equipped with 25-pin RS-232-C/CCITT V.24 compatible male connectors on each end.

**ORDERING SPECIFICATIONS**

An RS-232-C/CCITT V.24 compatible data communications controller with a microprocessor, memory, buffers, and transmitter/receiver circuits capable of performing specific tasks related to data transmission/reception via communications links when used in conjunction with Wang synchronous or asynchronous software. The controller must be available in a version physically suitable for installation in the central processor of the 2200 system to be used for data communications.

Standard Warranty Applies