

The advanced control concept from Mitsubishi:

# Integration of the control and command levels with the Slot PLC

**PC  
BASED  
CONTROL**



## The solution for the future: The A80BDE-A2USH-S1 Slot PLC

In recent years we have seen a huge increase in the use of PC technology in automation systems. Mitsubishi has now responded to this trend with a PC-based control system, the innovative Slot PLC. A separate power supply and its own operating system make the Slot PLC fully independent from both the computer hardware and the Windows operating system for maximum reliability.

### Outstanding failsafe performance and high MTBF rates

Even PC operating system crashes and power failures don't faze the Slot PLC – it never misses a beat or loses control of your machine or system. Its direct link to the extension rack's A-Bus guarantees genuine real-time performance comparable to that of a standard industrial PLC. This means excellent failsafe performance, high MTBF rates and maximum availability – plus easy integration of process data for use by visualisation systems and standard Windows applications.

### Keep your options open with active integration!

The Slot PLC is a genuine alternative to traditional PLC solutions, particularly for applications with a strong focus on direct machine control and monitoring. Integration of the PC makes it an active element of the automation concept, significantly reducing space requirements, cabling overheads and engineering costs. And with Mitsubishi you get superlative process integration support: In addition to I/O modules you can use all the special function modules of the Mitsubishi MELSEC A series, including analog I/O, positioning, temperature data acquisition and interface modules.

### Perfect network connections over all levels

Slot PLC is compatible with a wide range of network technologies used in automation systems, including TCP/IP Ethernet, Profibus, MELSECNET10/II, CC-Link, DeviceNet, AS Interface and I/O Link. The system also supports standard MS Office software interfaces for easy data sharing with visualisation systems and Windows applications. Machine and plant data – for example media consumption or material flow data – can be output for further processing with only minimum programming overheads.

*The Slot PLC's innovative PC-based control concept has a wealth of impressive benefits for the user:*

- **Integration of PLC and visualisation system in a single device**
- **Elimination of an entire network level**
- **Direct data exchange with Microsoft Office applications under Windows**
- **High MTBF rates**
- **Easy integration of production data in ISO 9001 quality control systems**

*Simplification of your applications' network structures.*

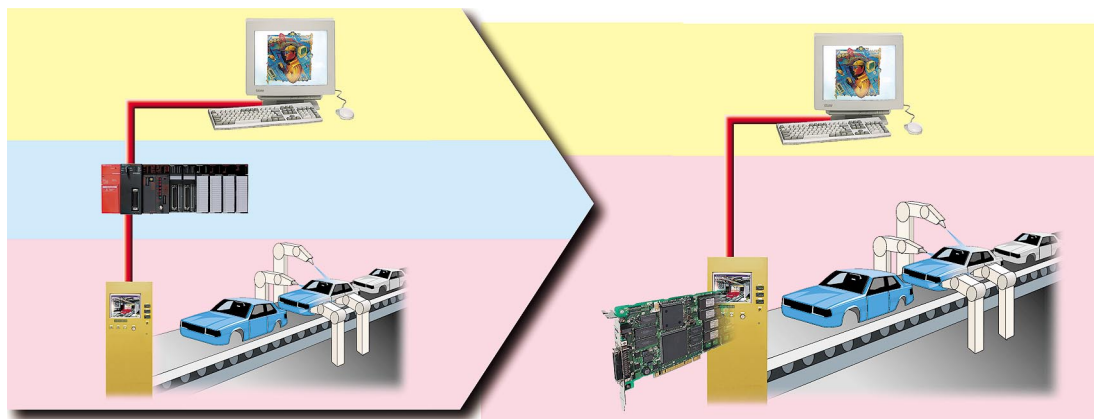


*The GPP/WIN package gives you full programming functionality via both PCI bus and RS422 interface, using these programming languages:*

- *Instruction List*
- *Ladder Diagram*

*Or for IEC 1131.3 standard programming via the RS422 interface choose MELSEC MEDOC plus (PCI bus communication in preparation) with support for all these programming languages:*

- *Instruction List*
- *Ladder Diagram*
- *Function Block Diagram*
- *Sequential Function Chart (SFC)*
- *Structured Text (ST)*



**Safeguard your present investments**

User-friendliness had top priority in the development of the Slot PLC, and it shows. For example, it can be programmed with the same familiar programming tools used for Mitsubishi's standard industrial PLC systems. This radically shortens the learning curve and cuts costs for investment in new programming software. You can make full use of your existing expertise and engineering base for your new PC-based applications right from the start. In addition to the programming packages GPP/WIN and MELSEC MEDOC plus (for IEC1131.3 standard applications), both of which are integrated in the forward-looking MELSoft concept, you can also use SCADA systems for developing a wide variety of applications. But that's not all – you can also create programs and functions for the Slot PLC with standard programming languages like Visual Basic or Visual C++.

**Specifications – Slot PLC A80BDE-A2USH-S1 CPU**

PCI bus	32-bit bus/33 MHz bus clock
Cycle period	0.09 µsec
PLC program memory	30 K steps
On-board RAM	448 KB
No. of I/O points	Max. 1,024
Supported networks (with optional expansion units):	Profibus FMS/DP, MELSECNET, CC-Link, I/O Link, DeviceNet, AS-Interface, Ethernet
Ext. power supply	5 V DC (±5 %)
Power consumption at 5 V DC	<2 A
Operating environment	0-55 °C, 10-90 % RH (non-condensing)

**PC/IPC hardware requirements:**

- Operating system Windows® NT 4.0 (service pack 4.0 or higher)
- Pentium 133 MHz processor or better; 32 MB RAM
- Monitor resolution 800 x 600 pixels, refresh rate >70 Hz; 3½" floppy drive
- 6 MB free space on the hard disk

Note: The system requirements of some software products can be various from those specified above.

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