UC-7420 facilitates protocol conversion for semiconductor manufacturing process
2008-03-28

Location / Country : Taiwan

Product Solutions:
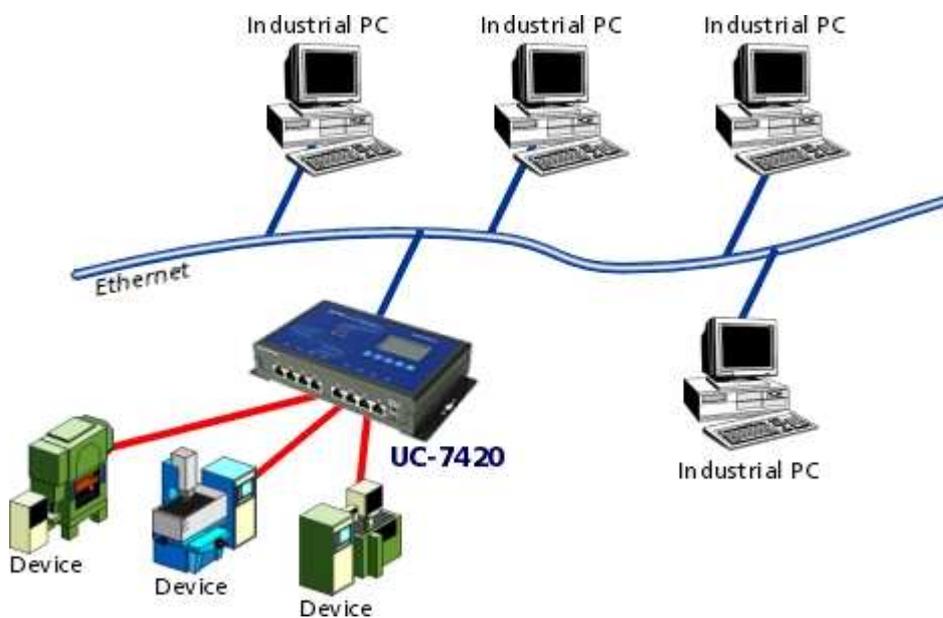UC-7410, UC-7420

RISC-based ready-to-run computer with 8 serial ports, dual LANs, USB, PCMCIA,

CompactFlash

Introduction
Project Introduction

Semiconductor plants have one characteristic that in the past has made management difficult. The plants use different types of machines that use different protocols, making it hard to design a coordinated system that can collect, analyze, and process data from all stations in the plant. MOXA's UC-7420 helps solve this problem by providing an "open" programming platform for users to download their own custom protocol conversion software. Data can also be transferred to several backend hosts at the same time.
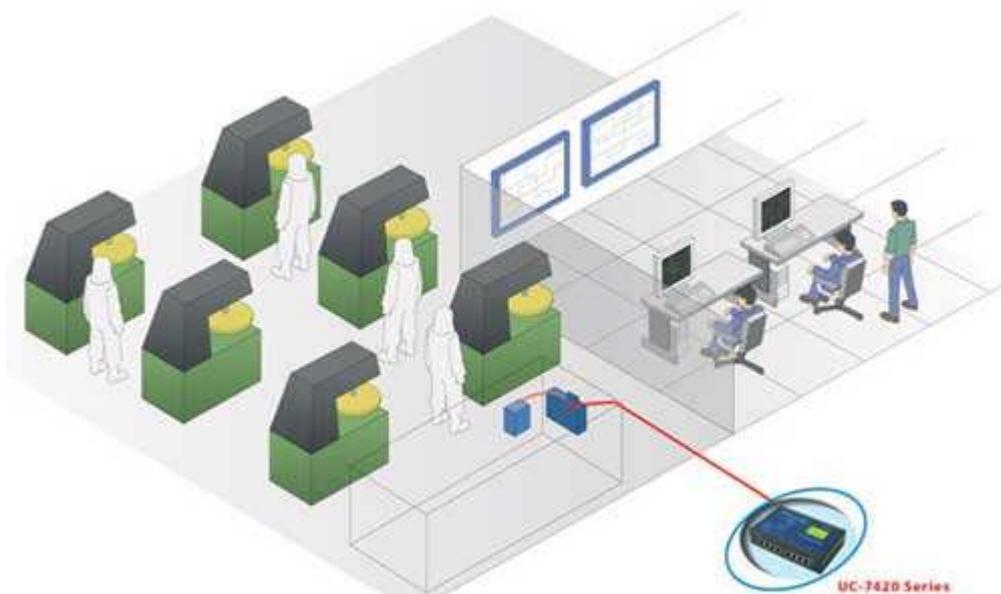

Moxa Solution

Protocol Conversion and Front-end Data Processing

The data collected by a FAB floor can come from different devices. One of the tasks that the UC-7420 unit must handle is protocol conversion, since there is no guarantee that all of the devices will use the same protocol. In addition, the UC-7420 can be used to do preliminary

data processing before downloading data to the central computer. MOXA's UC-7420 is ideally suited for these tasks, since the user can easily embed a C program that is custom written for the devices used at the station. If future changes involve adding or removing devices, the programmer simply needs to modify the C code, recompile it, and then download the executable program to the UC-7400 unit.

Connecting to the Network and the Internet

In addition to being programmable, MOXA's embedded computers also offer users with an array of connection options. To begin with, data entering the serial ports from attached sensors can be processed and then forwarded through one or both of the dual Ethernet ports to the LAN. One of the serial ports can also be connected to a V.90 or GPRS modem for PPP connections, and a PCMCIA port is available for installing a wireless LAN card for 802.11b/g networks.

Why Moxa

- No fan, no hard drive design for longer MTBF
- CompactFlash slot for adding gigabytes of storage space
- Multiple connection options for greater networking versatility
- Programmability gives system integrators infinite possibilities