



#### APPLICATIONS IN EDUCATION FIELD

PC is playing an important role in industrial field because of high-speed development, reliable, low-price, various functions. Hardware interface circuit and controlled software complement each other in Microcontrolled system. Engineers in this field must deeply understand the skills of hardware interface and software designed that can function efficiently in microcontrolled system.

In general laboratory, either in education or academic field, tutors are not willing to teach this section for the following reasons

- It will damage the PC for wrong soldering in experiment circuit board.
- Losing component parts or cause damages by dismantling PC case.
- It is time wasting to turn on/off if there are mistakes in experiment, because of the necessary load and save operation.
- Bread board experiment are not accepted. For solving above problems, simply plug in PC EXTENSION INTERFACE PROTECTOR PCFACE-III which can provide you functions as following.
- The cable line is long enough up to 75 cm between PC and PCFACE-III.
- Conveniently four slot designed to plug in/out the unit under test on PCFACE-III.
- No need to dismantle the case of PC.
- Easy to test and measure messages from PC according to pin indication on slot.
- Easy to detect shorted circuit according to power indication. It can prevent the malfunction of power.

- PCFACE-III which is a Protector of Mother Board type. Users can turn on/off PCFACE-III instead of turning on/off the whole PC system. It is convenience and time saving, especially in testing. You will find work efficiency that can be enhanced.
- Able to perform bread board experiment by using the PCFACE-III slot pin diagram.
- No hard state limited for interface experiment.

#### PCFACE SPOTLIGHTS

- Plug in/out Interface Card by not turning off PC
- All message cable and power have block function
- Real signal extension system, ALL messages can be testing on extension slot.
- Four layer designed, no disorderly message and with HIGH stability.
- Over current protecting indication in four LED. Education authority can introduce public printed textbook to perform I/O interface experiment which listed as following. LEAP ELECTRONIC also provides I/O experiment card for the experiment.
- Assembly language programming
- Implementing standard program structures in 825x assembly language
- Strings, procedures and macros
- System connections, timing and troubleshooting
- Interrupts and interrupt applications
- Digital interfacing
- Analog interfacing and industrial control
- DMA, DRAMs, cache memories, coprocessors and EDA tools

- C, a high-level language for system programming
- Microcomputer system peripherals
- Data communications and networks
- The experiment of 8253/8254/8255

#### APPLICATIONS IN INDUSTRIAL FIELD

PC EXTENSION INTERFACE PROTECTOR are widely applied in industrial field. Usually, it can be used in three occasions as following.

- R&D dept: for I/O designing or experiment.
- Maintenance: To maintain all kinds of Interface Card.
- Interface Card manufacturer: To do QC for Interface Card by using interface slot.

There are a few problems which can disturb your work or damage your PC by using interface slot on PC.

- Shorted circuit caused by soldering in design or experiment interface.
- For not knowing reasons, damage main unit by using the ruined Interface Card.
- In Interface Card manufacturing, harmful Interface cards causes losses by doing QC for their products.

LEAP ELECTRONIC presents PCFACE series which can prevent those problems for you.

#### PCFACE SERIES FEATURES

- Prevent damages for PC during experiment.
- Prevent damages during Interface Card mending.
- Test on PCFACE EXTENSION INTERFACE slots, you can promptly choose the harmful one to prevent the damages on the PC.
- PCFACE which is a Protector of Mother Board type. User can turn on/off PCFACE instead of turning on/off the whole PC system. It is convenience and time saving, especially in testing. You will find work efficiency that can be enhanced.
- Prevent malfunction from short circuit on the slot by power protection in PCFACE.
- Prevent damages on mother board or Interface Card by message protection sending to the extension slot.