

PHI Project

-Name **PHI Project (fai project)**

-Origin **Acronym of Prober Handler Interface**

May 27th, 2008

PHI Project

1. Back ground
2. Current issues
3. Approach
4. Scope of influence
5. Future plan

● GPIB procurement issue

- Driver for Linux version
- Driver for latest kernel
- I/F card corresponding to ROHS

● Shift to next generation control BUS

- Ethernet in SEMI300
- USB or E-net in instruments

- **Procurement issue**

- few I/F suppliers

- **Spec issue**

- transfer speed 1MB/sec , cable length 4m

- **Connection issue**

- incompatible?

- **Expansion issue**

- unclear communication spec at adding functions

3. Approach

Started a new Prober-Handler Interface (PHI) project

- ADVANTEST
- Tokyo Electron
- Tokyo Seimitsu
- Yokogawa Electric

:(alphabetical)

●PHI project activity progress until now

- Oct/2005 Had the 1st meeting
held following meetings after that
 - » Examination of I/F hardware
 - » Examination of new protocol
 - » Examination of command spec

- Dec/2006 Agreed the new communication plan

- Mar/2007 Named “PHIP”
(Acronym Prober Handler Interface Protocol)

● Get rid of dependence to platform

- I/F
 - use Ethernet

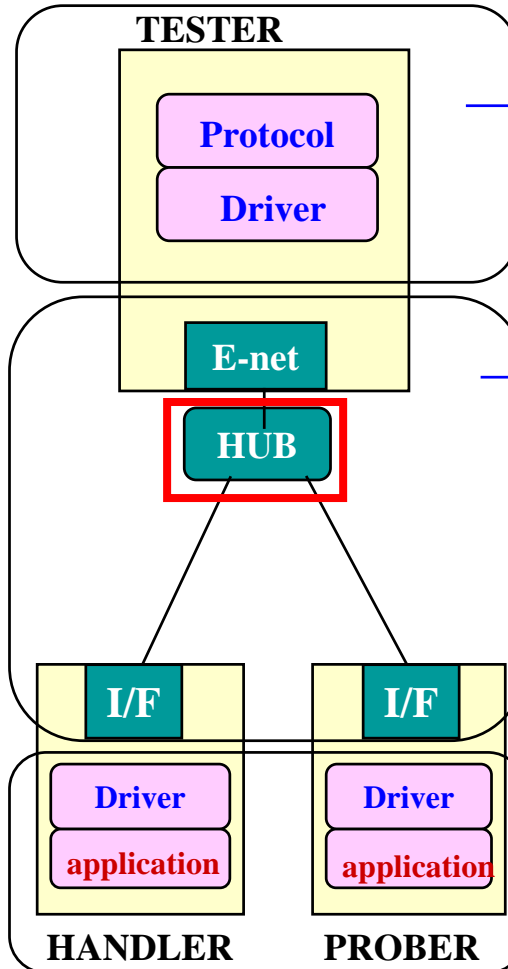
- Communication protocol
 - use TCP/IP

- Equipments (Tester/Prober/Handler)
 - change command system
 - consider adding functions in the future,
(e.g. no limitation of number)

3. Goal

Current way

- Different control commands
- Dedicated driver is required
(GPIB board vendors supply)
- Hard to procure I/F hardware
- No margin hardware spec
cable length : 4m
xfer speed : 1MB/sec
- Customize request from users



New way

- Unified command system
- Standard support by OS
E-net + TCP/IP
- Standard I/F
E-net I/F
- Hardware specifications with enough margin
cable length : 100m
xfer speed : over 10MB/sec
- command spec considered expansion

1. Users

- ① Correspond to the new commands of FA & device programs)

2. Prober, Handler, Tester makers

- ① Correspond to the new commands
- ② Correspond to the I/F hardware

3. Common for users & makers

- ① Consider migration
- ② Spread for the other makers

5. Future plan

1. Proposal

The PHIP is “proposal”. In addition, development has not been completed yet. The PHI project companies will have plans to push forward development with these specifications in the future.

2. Schedule and contact

Refer to the PHI project companies for development program and the release plan.

Thank you

PHI Project Team