

# PROFINet

# PROFINet

가

( ) IT 가 . PROFINet

가

PROFINet

. PROFINet

PROFIBUS

, PROFINet

IT

International

PROFIBUS

PROFIBUS

PROFINet

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PROFINet

PROFINet

motion control application(PROFIdrive)

fail-safe application (PROFIsafe)

PROFINet

가

= 가

( )

PROFINet

( , , , , )가

PLC PC

( ) ,

(가 , ) ,

( ,

)

1. PROFINet

IT , PROFIBUS

PROFINet

1999

PROFINet

:

= , ,  
( )

PROFIBUS . 2. Components and Objects

( , PROFInet  
).

PROFIBUS (PLC  
, DP ) 가 가 IT

가

= PROFInet 가 가

가,

IT Ethernet  
PROFIBUS 가

PROFIBUS

PFOFIBUS PROFInet 가  
가

PROFInet

( , , ,  
). 가 ( )  
PLC, PC)

가

, PROFInet Ethernet ( )  
, , , ) 가

PROFINET COM

PROFINET ( PROFIBUS DP )

가 Runtime Object Model (AUTO)

COM COM IP

AUTO DCOM DCOM

COM DCOM wire protocol firmware

actuator, , CNC ACCO(Active Control Connection Object) RT Auto(runtime automation objects) 가, (Extended Logical Device object) 가

DCOM 가 ID DCOM 가 DCOM

PROFINET 가 PROFINET loadable (fixed functionality) 가 가 (ES)

, SIMATIC 7

3. Runtime Communication RT Auto RT Auto RT Auto

ES Auto task) 가 PROFInet  
 ES PROFInet  
 PROFInet 가 PROFInet  
 PROFInet PROFInet  
 RT Auto PROFInet  
 Runtime Communication WINDOWS 2000, NT, CE 가  
 PROFInet 4.  
 RPC/DCOM PROFInet  
 DCE RPC TCP(UDP)/IP (addressing) ( PROFInet / )  
 TCP(UDP)/IP , PROFInet /  
 가 Ethernet AS PROFIBUS  
 PROFInet (creating) ( , )  
 (using) (application configuration)  
 PROFInet Ethernet 가  
 (non-deterministic response) Ethernet 가 AUTO  
 가 anchor .  
 (highly time-critical AUTO view

.  
 , 가 /  
 (HMI perspective) 가  
 ES AUTO( automation object)  
 가 ,  
 가  
 가 AUTO  
 .  
 .  
 .

PROFINet

Microsoft COM/DCOM

: TCP(UDP)/IP DCOM  
wire protocol

(HMI): Microsoft OLE, ActiveX

PROFIBUS

PROFIBUS

PROFINet spec 가

. PROFINet

(software reference implementation)

## 5. Specification

PROFIBUS International

(Open Source)

Spec

PROFINet

, PROFINet IT

. Open

Source PROFINet

PROFIBUS

International

PROFINet 가  
 PROFINet  
 (MES : Manufacturing  
 Execution System)