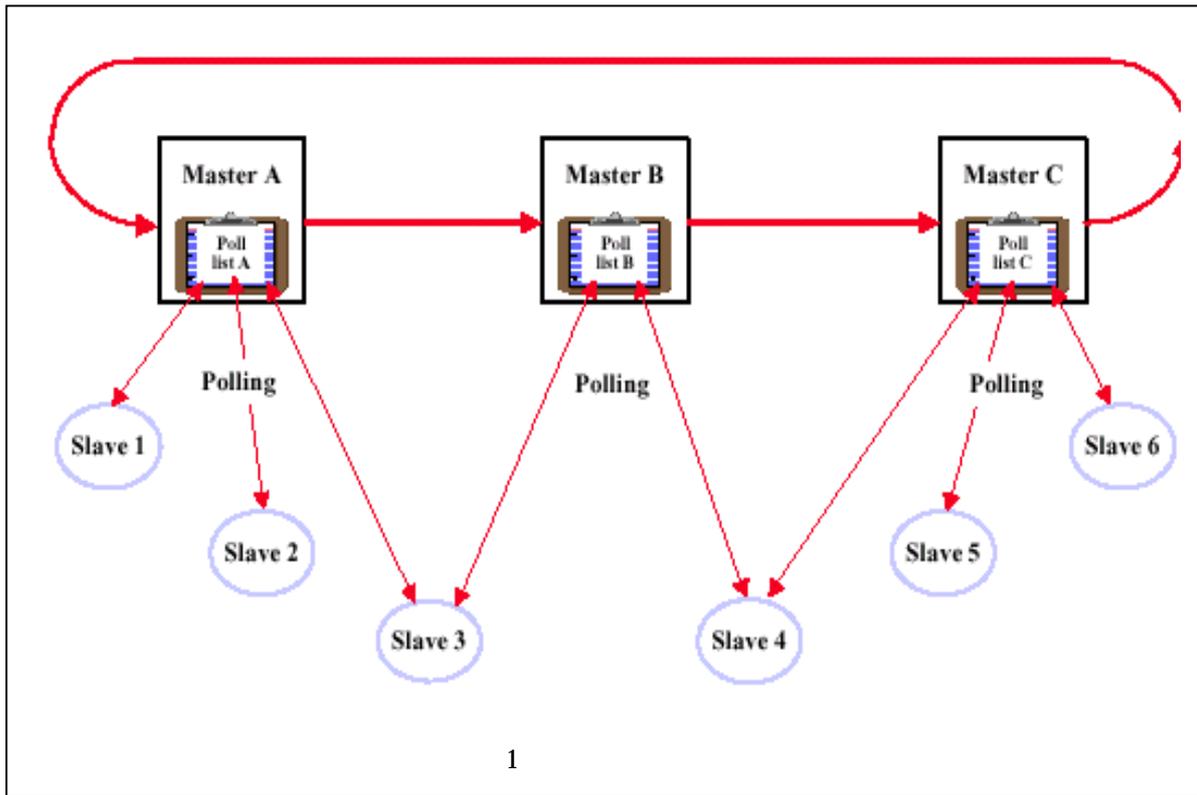


- 1. bus 가? 3. Bus 가?
- (CMA/BA, CMA/CD, master/slave, multiple masters)



PROFIBUS Master/Slave (hybrid media access) Token 가 가

PROFIBUS ring star 가 .

Services :

- SDN (multicast/broadcast 가)
- SDA 가?
- SRD , (bi-directional)

4. Repeater 가

(Copper) 1,000m 9.6 – 187.5 kBaud .

- 2. ?

terminal resistors

12. 가
가?

8. Field device가 bus
가?

Power-up config_check ident
number 가

PROFIBUS PA 가
IEC 1158-2

13. algorithm 가
가?

coupler 120mA
300mA

PROFIBUS
가
- byte Checkbit가
- Checksum
- frame Startdelimiter
- Addressing (source destination)
- Inactivity detection
- Master Transmitter check
- Token passing
- error
- PROFIBUS message

9. addresses 가?
가 가

- DIP switche
- bus address bus
Any choice is possible

10. address

address
Master token
frame address
Slave
mater

14. parameter programming 가
가? (logic inversion
Boolean operation)

parameter setup
- PROFIBUS parameter(
237 byte)
parameter
- master PC Parameter
load

11. address
가?

-
- Slave
- master

15. What I/O granularity does the Bus support.

- Granularity .
- Integer, unsigned, floating point, string
가 .
- node bit granularity IO-module 가
- ..
- AS-I bit-level bus
link가 가

16. address ?

byte가 .

17. AC DC point

가? 가 가 가

..

DC ET200M card channel\$

AC ET200M card channel\$

small node 가 16 가

ET200L\$

18. protocol 가?

Protocol 70% 가
performance metrics 40%
가

19. multiple protocol 가?

- PROFIBUS FMS, DP, DP 3가

20. 가 ?

PTO 800

1600

21. Network scanner card ?

- computer : PCI, PCMCIA, PC 104
ISA, VME.

- PLC PROFIBUS card가
(AB, Modicon, GE, Mitsubishi)

- solution .

**22. PROFIBUS
3rd party
가?**

PROFIBUS PROFIBUS International

25

working Group

가

***Installation, Diagnostics and
Commissioning***

1.
가?

- bus

가 .

(electric meter)

.(

segment 110 130 ohm
가)

protocol 가 .(network
configuration PLC configuratio
)

2. Segment

?

- Segmenting repeater optical link module
- termination

3. Network

가?

PROFIBUS Master application
가 .

- slave (slave , ,)
- slave
- Master
- counter

Service engineer bus monitor bus

- Monitoring
- Hardware filtering mechanism
- Time stamps
- Trigger conditions
- Special events

4. Network configuration

가?

- Network download protocol

5. node configuration 가
monitoring 가

가?

- bus monitor 가 configuration tool
- PLC scan cycle time reaction time .

6.

?

- Master(PLC PC)가 가 field device
- slave master application

7. fault
MTTD(mean time to diagnose) 가

가?

- Error .
- Worst case 2 cycles is the maximum delay to transport diagnostic to the master.(regarding the figures below, this is less than 2,2ms/13,4ms at 12Mbaud/1.5Mbaud).
- Every other actions and their duration is application dependant. If your system has a backup strategy for that error the bus topology helps to run even in the presence of an error.

8. hot swap 가 가?

- PROFIBUS

- Slave device master 가 ..

9. program-mer

가?

- PC software가
- startup
- master slave bus parameter

Performance Metrics

1. 256 I/O(4096 total points) 16

가

?

- 12MBaud 1.09ms
- 1.5MBaud 6,71ms

2.

가?What is the best and worst case repeatability of this configuration.

- 99%가 timing
(station dropping out) timing

- 1 500/100µs(1,5/12Mbaud)

- station 700/300µs
가 .

3. 256 I/O(16 bit words)

?

1 . PROFIBUS format

가 . 256 words 4096 I/O point

. Master station 가

PLC PC I/O

가 .

4. token 가?

- mono master system token

- multiple master Token

가 .

- Master가 token

1.5Mbaud 1.6 ms

12Mbaud 0.67ms .