

<Probee GPIO configuration for 1:N communication>

ProBee GPIO communication HowTo_Change detection sampling

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Application Diagram

Master -(Serial)- ZE10A - (wireless) - ZE10B(Salve1) - GPIO
- ZE10C(Salve2) - GPIO

Master can receive GPIO status of slaves and can control the slaves GPIO output.

Network configuration

1. ZE10A (Coordinator_Master)

AT+NODETYPE=1<CR> OK AT+PANID=1111 <CR> OK ATZ<CR> OK	#Node Type configuration(1=Coordinator) #PAN ID configuration(4 digit number) #Apply and Reboot
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2. ZE10B (Router_Slave1)

AT+NODETYPE=2<CR> OK AT+PANID=1111 <CR> OK ATZ<CR> OK	#Node Type configuration(2=Router) #PAN ID configuration(4 digit number, same as Master) #Apply and Reboot
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3. ZE10C (Router_Slave2)

AT+NODETYPE=2<CR> OK AT+PANID=1111<CR> OK ATZ<CR> OK	#Node Type configuration(2=Router) #PAN ID configuration(4 digit number, same as Master) #Apply and Reboot
---	--

GPIO Transmit mode configuration

1. ZE10A (Coordinator_Master) : Receive GPIO status from Slaves

AT+TRANSMITMODE=0<CR> OK ATS11=1 OK ATZ<CR> OK	#TRANSMITMODE configuration(0=command mode) #Display the received data #Apply and Reboot
---	--

2. ZE10B (Router_Slave1)

AT+DESTLA=000195000000000A<CR> OK AT+GPIO=5551200000000 OK ATS44=1 OK ATZ<CR> OK	#Configure the address of ZE10A # GPIO setting, GPIO3:Input, GPIO4:Output(default low) # SetGPIO change detection sampling mode. If <value> is set to 0, GPIO sampling is disabled. #Apply and Reboot
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3. ZE10B (Router_Slave2)

AT+DESTLA=000195000000000A<CR> OK AT+GPIO=5551200000000 OK ATS44=1 OK ATZ<CR> OK	#Configure the address of ZE10A # GPIO setting, GPIO3:Input, GPIO4:Output(default low) # SetGPIO change detection sampling mode. If <value> is set to 0, GPIO sampling is disabled. #Apply and Reboot
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Check Zigbee network on Coordinator.

AT+DSCAN : Perform a scanning for existing nodes in the current network.

```
ZR |000195000000001C|9736|PTv1.2|ZE10|ProBee-ZE (Slave2)
ZR |000195000000003D4|0C76|PTv1.2|ZE10|ProBee-ZE (Slave1)
ZC* |00019500000000212|0000|PTv1.2|ZE10|ProBee-ZE (Master)
OK
```

Received GPIO status from slaves

```
++000195000000003D4|1111000000000|****,****,****,****:GPIO3 High
++000195000000003D4|1110000000000|****,****,****,****:GPIO3 Low
++000195000000001C|1111000000000|****,****,****,****:GPIO3 High
++000195000000001C|1110000000000|****,****,****,****:GPIO3 Low
```

Set GPIO output on slaves

Master send remote GPIO set command via serial.

```
AT+REMOTE=000195000000003D4,AT+DIO4=1 : Set GPIO4 High
AT+REMOTE=000195000000003D4,AT+DIO4=0 : Set GPIO4 Low
AT+REMOTE=000195000000001C,AT+DIO4=1 : Set GPIO4 High
AT+REMOTE=000195000000001C,AT+DIO4=0 : Set GPIO4 Low
```