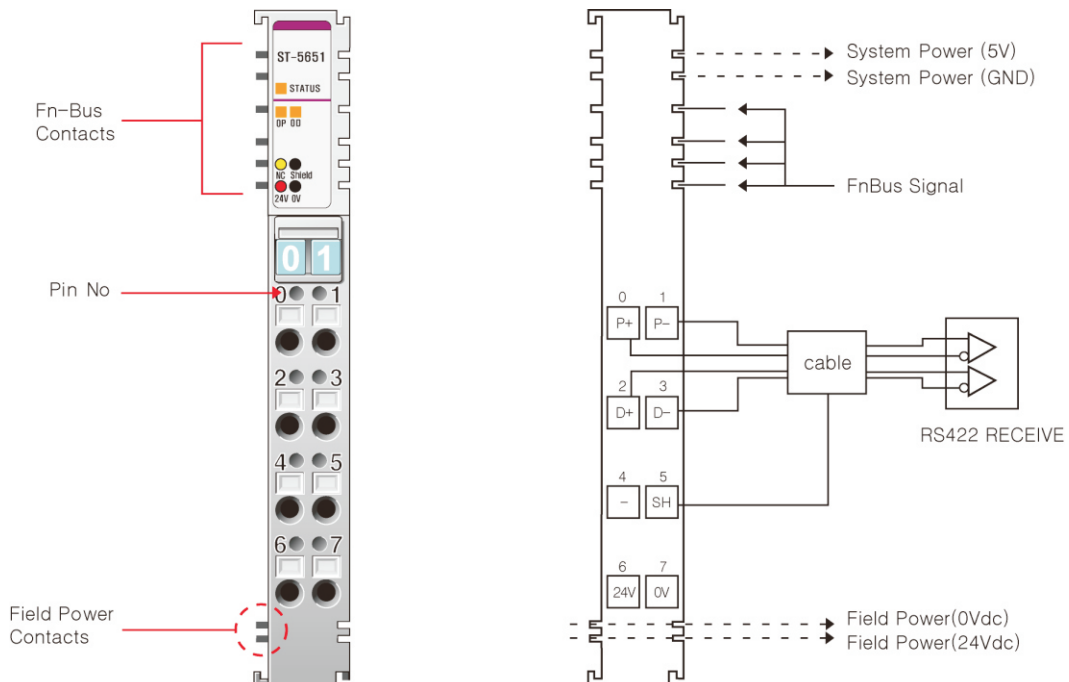


1 Channel Pulse Output (RS422)

- ST-5651은 1 Channel Pulse Output Module입니다.
- 이 Module에는 3개의 상태표시 LED가 있으며, 하나는 Module의 상태, 나머지는 통신 상태를 나타냅니다.
- FnBus와 통신 입.출력 신호선 사이에는 Photocoupler를 사용하여 전기적 절연이 되어 있습니다.

Items	Specification	Pin No	Description
Module Specification		0	P+ (RS422 Differential Output)
Number of Channels	1 Channel, RS422 Differential Output	1	P- (RS422 Differential Output)
Number of Outputs	2 Output(1 Pulse Output, 1 Pulse Direction Output)	2	D+ (RS422 Differential Output)
Indicators	1 Green/Red FnBus Status 1 Pulse Output LED, 1 Pulse Direction Output LED	3	D- (RS422 Differential Output)
Pulse Output Frequency	5~20,000Hz±1.0%	4	-
Pulse Output Duty	50%±0.1% Fixed, Ton>10ns, Toff>10ns	5	Shield
Pulse Output Quantity with one Command	Continuous Pulse Output Max. +1~32767 : Pulse Direction Output OFF Max. -1~32767 : Pulse Direction Output ON.	6	Field Power 24V
Pulse Output Counter	Signed 32bit-wide	7	Field Power 0V, Common
Common Type	1 Common, 1 Shield		
General Specification			
Power Dissipation	Max. 150mA@5.0Vdc		
Isolation	I/O to Logic : Photocoupler Isolation I/O to Field Power : Non-Isolation		
Field Power	Supply Voltage : 24Vdc nominal Voltage Range : 11~28.8Vdc Power Dissipation : Max. 40mA@24Vdc		
Wiring	I/O Cable Max. 2.0mm ² (AWG#14)		
Weight	70g		
Module Size	12mm x 99mm x 70mm		
Environment Condition	Refer to " Environment Specification"(page : 1-257)		

Wire diagram



I/O Process Image Table

Input Data

Byte Offset	Decimal Bits							
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte #0				Real Pulse Output Counter Ch#0 LL				
Byte #1				Real Pulse Output Counter Ch#0 LH				
Byte #2				Real Pulse Output Counter Ch#0 HL				
Byte #3				Real Pulse Output Counter Ch#0 HH				

A Pulse Output Counter is a signed 32bit-wide data.

Output Data

Byte Offset	Decimal Bits							
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte #0				Pluse Frequency Ch#0 Low Byte				
Byte #1				Pluse Frequency Ch#0 High Byte				
Byte #2				Pluse Output Qty Ch#0 Low Byte				
Byte #3				Pluse Output Qty Ch#0 High Byte				
Byte #4	RUN0	ECP0	----	CLRCNT0	----	----	Frequency Multiple0	
Byte #5	----	----	----	----	----	----	----	----

- Pulse Output Qty is a signed 16bit-wide data.
- The duty of each channel frequency is fixed by 50%.
- If Pulse Output Qty >= 0, Direction Output turns OFF. If Pulse Output Qty < 0, Direction Output turns ON.
- Byte8 is a control for Channel#0,
- RUN0 : Pulse Output Run
- ECP0(Enable Continuous Pulse) : If this bit is '1' and Pulse Output Qty is not 0, pulse output always runs.
- CLRCNT0 : Clear Real Pulse Output Counter

Frequency Multiple0 Selection

Value	Description
0(B'00)	x1 Frequency Multiple
1(B'01)	x10 Frequency Multiple
2(B'10)	x100 Frequency Multiple
3(B'11)	x1000 Frequency Multiple

- If Pulse Frequency=123 and Frequency Multiple=2, real pulse output is 12.3KHz (123*100).

Configuration Parameter Table

Byte Offset	Decimal Bits							
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							
1	Reserved							