

## YL600: advicePLUS for M32R/ECU & M32R/E series

### ■ Specifications

Common Part	
Target Processor	M32R/ECU: M32170, 32171, 32172, 32173, 32174, 32180, 32182 M32R/E: M32102
Operation Voltage	MCU voltage-dependant
Operating Clock	MCU operating clock-dependant
Memory Space	All memory space is released to a user's system
Interrupts	All interrupts are released to a user's system
Target System Interface (when connecting to Probe Head Cable)	40pin Connector (standard for advicePLUS-M32R) Socket on Target: 1.27mm pitch by Samtec FTSH-120-01-L-DV-ES-K (with Lock, Guide & Polarity key, SM type) FTSH-120-01-L-DV (without Guide & Polarity key, SM type) FTSH-120-01-L-D-ES-K (With Lock, Guide & Polarity key, TH type) FTSH-120-01-L-D (without Guide & Polarity key, TH type) FW-20-03-L-D-280-120 (without Guide & Polarity key, approx. 9mm stack height, SM type) FW-20-02-L-D-280-120 (without Guide & Polarity key, approx. 9mm stack height, TH type)
Target System Interface (when directly connecting to Probe Board)	40pin Connector (standard for advicePLUS-M32R) Socket on Target: 1.27mm pitch by Samtec CN-A (40pin, signal side): FW-20-03-L-D-280-120 (with Guide, without Polarity key, approx. 9mm stack height, SM type) FW-20-02-L-D-280-120 (with Guide, without Polarity key, approx. 9mm stack height, TH type) CN-B(30pin, GND side): FW-15-03-L-D-280-120 (without Guide & Polarity key, approx. 9mm stack height, SM type) FW-15-02-L-D-280-120 (without Guide & Polarity key, approx. 9mm stack height, TH type)
Breakpoint	1024 points by replacing instructions with software break Temporary break: 1 point Countable break: 1 point Event break: 15 points (2 points without Trace module)
Flash Memory Programming	Scheduled to be available soon

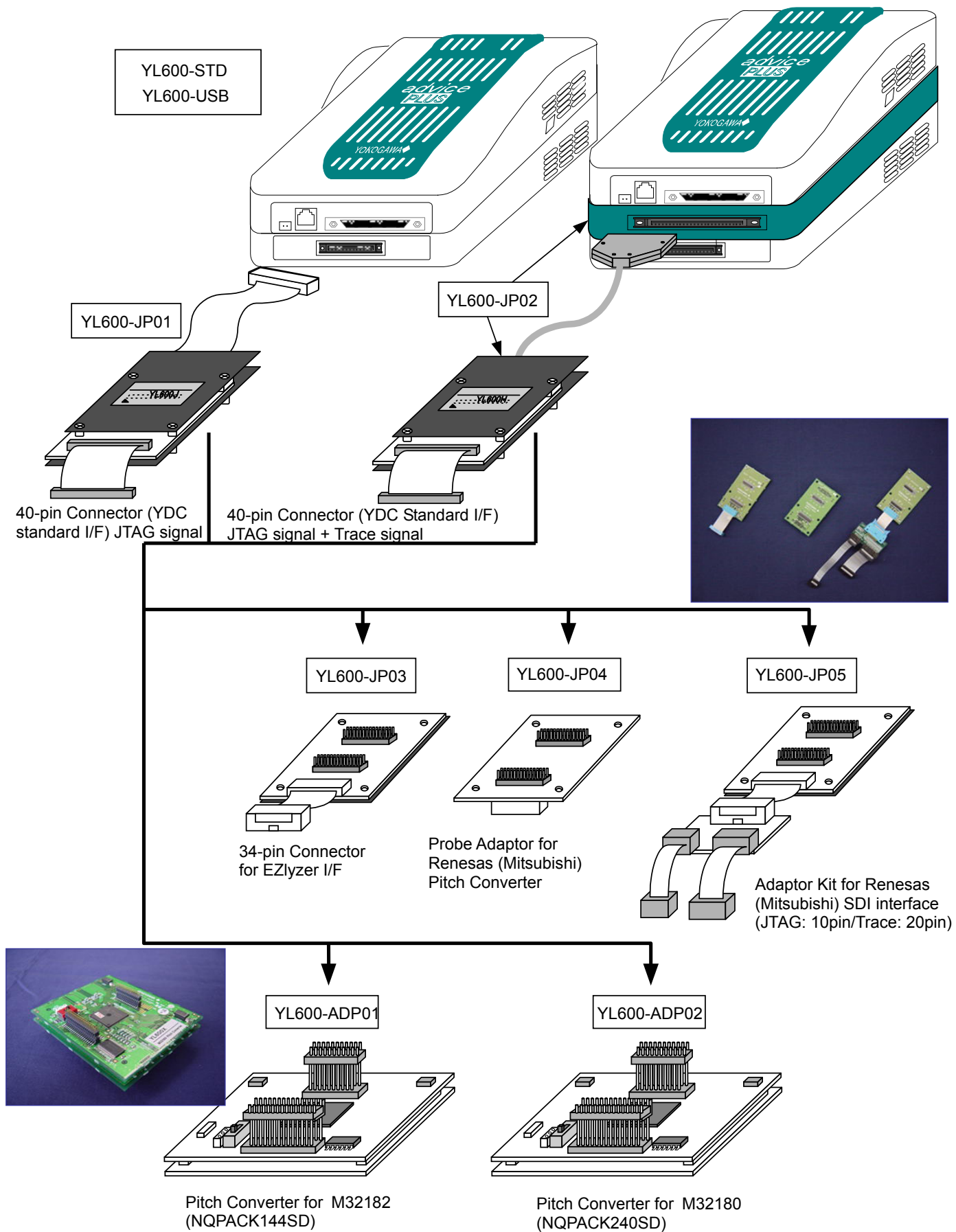
Optional Features: SDI Trace	
Trace	Size: 32K samples Mode: PC branch trace/Data trace Time stamp resolution: 20ns/100ns
Event	Number of events: 15 points (max.) (including two OCD events) Triggers: 15 points (max.) (2 points of the events set up to be selected and two OCD events included) Trigger condition: The following AND/OR settings are available: Match/not match/Address range/Out of Address range Access Status: R/W/RW
Performance	Can be measured with the event setup conditions

Other Specifications	
Host PC	PC/AT Compatible, Microsoft Windows 98SE, Me, XP, NT4.0, 2000 10BASE-T/100BASE-TX, USB1.1
Debugger	microVIEW-PLUS (DL600)
Compiler	Mitsubishi's C compiler Mitsubishi's GNU C compiler Sygnus' GNU C compiler Gao's C compiler DIAB's C compiler

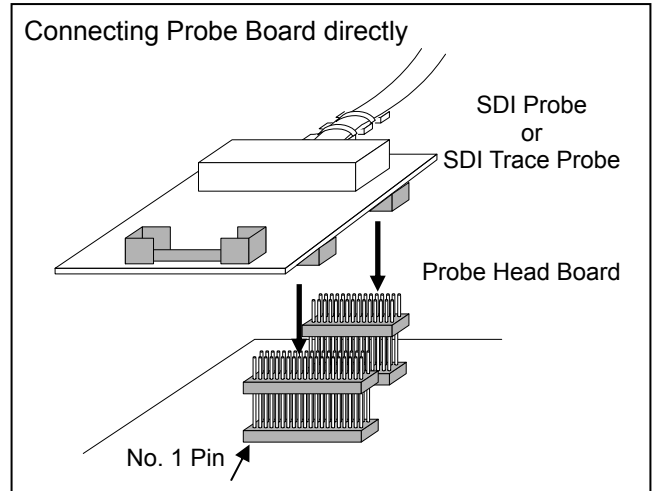
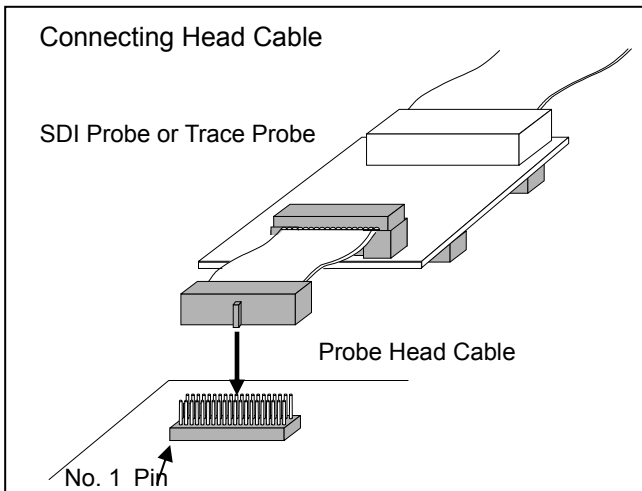
## ■ System Configuration

Model		Descriptions
1	YL600-STD	Main Module for M32R, Ethernet I/F, AC adaptor
	YL600-USB	Main Module for M32R, USB I/F and cable, AC adaptor
2	YL600-JP01	SDI Probe for M32R(YDC standard interface 40pin)
3	YL600-JP02	SDI Trace Module for M32R, Probe for SDI Trace
4	YL600-JP03	Interface for 34-pin connector for YDC's EZlyzer (KL4312)
	YL600-JP04	Probe adaptor for Renesas (Mitsubishi) Pitch converter
	YL600-JP05	Adaptor Kit for Renesas (Mitsubishi) SDI interface (JTAG:10pin/Trace:20pin) (including YL600-JP03)
5	YL600-ADP01	Pitch converter for M32182 (NQPAC144SD)
	YL600-ADP02	Pitch converter for M32180 (NQPAC240SD)
6	YL600-DP01	Dummy Target for M32182, AC adaptor
	YL600-DP02	Dummy Target for M32180, AC adaptor
7	DL600	microVIEW-PLUS for M32R

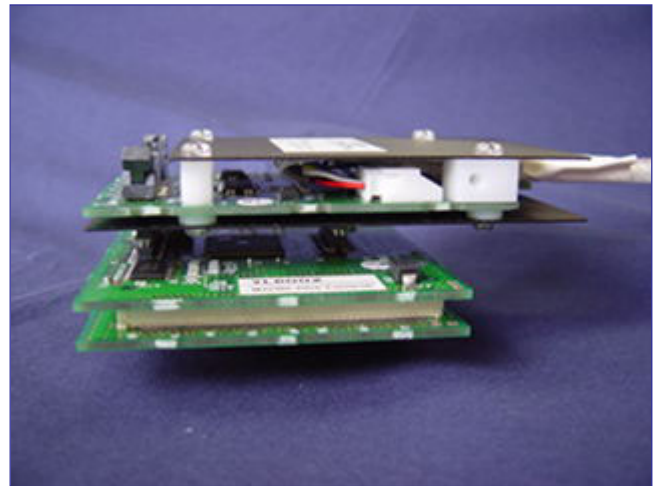
■ System Configuration



## Probe Connection Diagram



Connecting Probe and Pitch Converter



Connecting Probe and Converter (Side View)



Dummy Target (YL600-DP01)



Connecting with Dummy Target

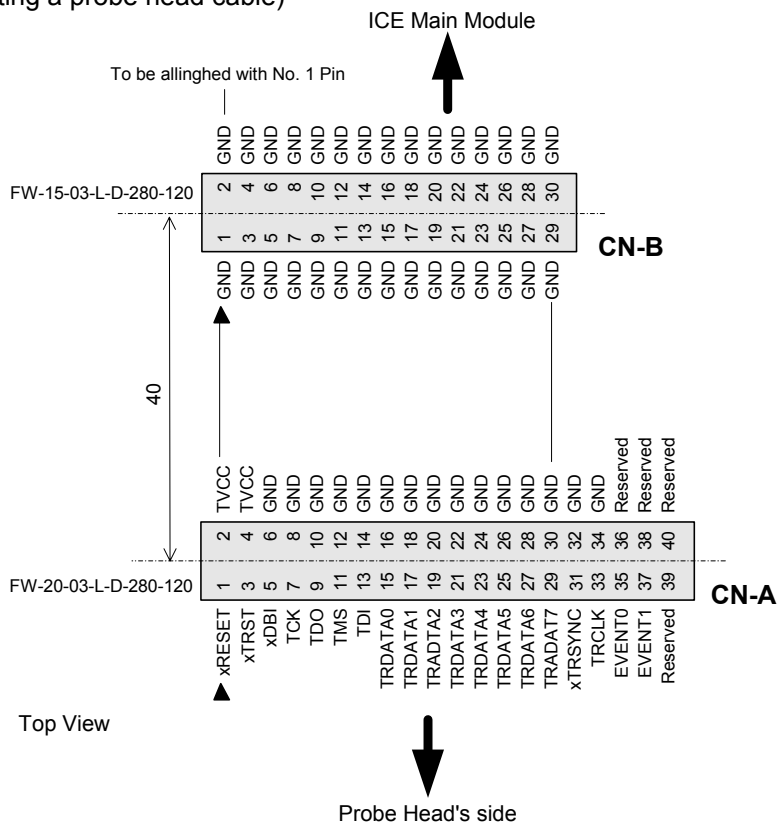
## Pin Assignment

Pin No.	Pin Name	I/O *	Function	Pin No.	Pin Name	I/O *	Function
1	xRESET	Input/Output	System Reset	21	TRDATA3	Output	Trace Data 3
2	TVCC	Output	Target Power (VCCE)	22	GND	—	0V
3	TRST	Input	JTAG Test Reset	23	TRDATA4	Output	Trace Data 4
4	TVCC	Output	Target Power (VCCE)	24	GND	—	0V
5	xDBI	Input	Debug Interrupt	25	TRDATA5	Output	Trace Data 5
6	GND	—	0V	26	GND	—	0V
7	TCK	Input	JTAG Test Reset	27	TRDATA6	Output	Trace Data 6
8	GND	—	0V	28	GND	—	0V
9	TDO	Input	JTAG Test Output Data	29	TRDATA7	Output	Trace Data 7
10	GND	—	0V	30	GND	—	0V
11	TMS	Input	Test Mode Select	31	TRSYNC	Output	Trace Sync. Signal
12	GND	—	0V	32	GND	—	0V
13	TDI	Output	JTAG Test Input Data	33	TRCLK	Output	Trace Clock
14	GND	—	0V	34	GND	—	0V
15	TRDATA0	Output	Trace Data 0	35	EVENT0	Output	Event0 Output
16	GND	—	0V	36	Reserved	—	Reserved Pin
17	TRDATA1	Output	Trace Data 1	37	EVENT1	Output	Event1 Output
18	GND	—	0V	38	Reserved	—	Reserved pin
19	TRDATA2	Output	Trace Data 2	39	Reserved	—	Reserved pin
20	GND	—	0V	40	Reserved	—	Reserved pin

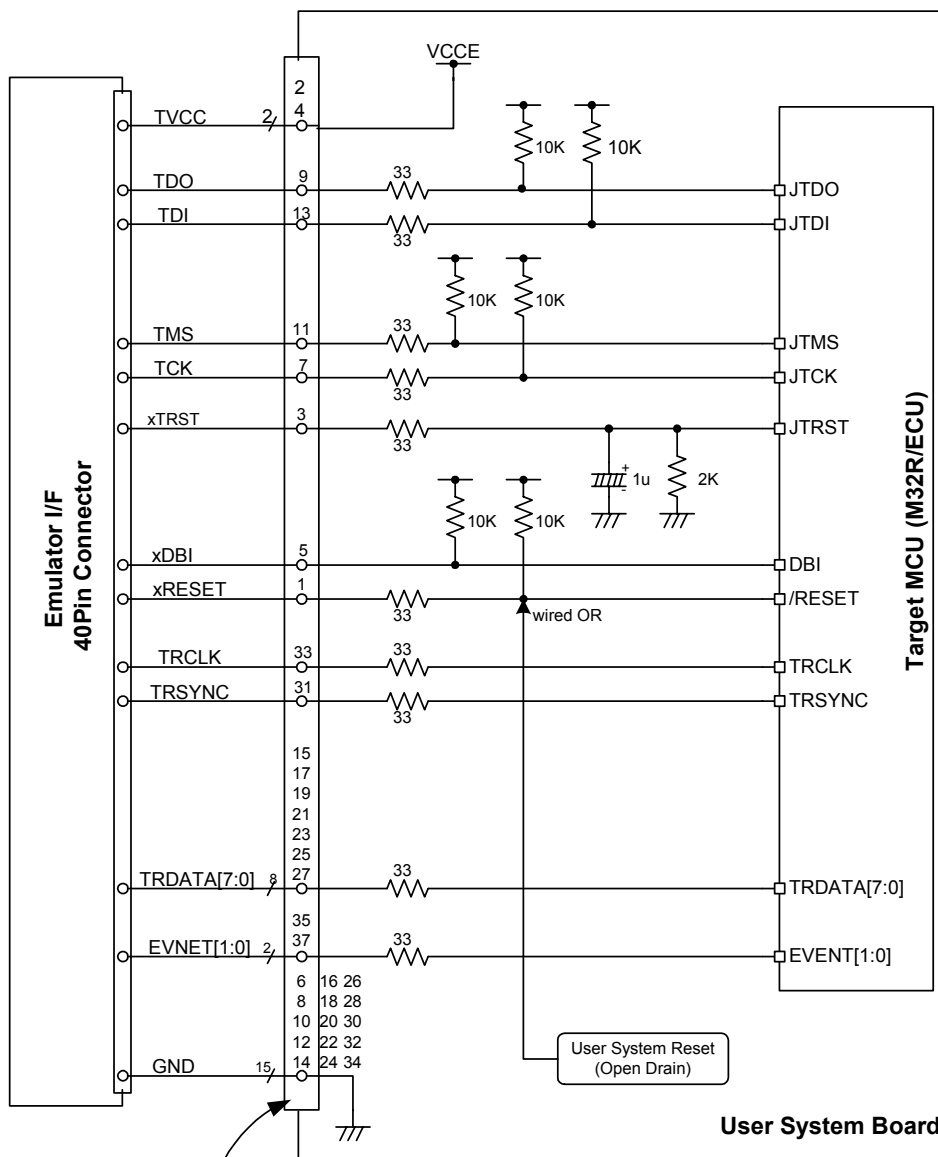
\* The I/O direction is viewed from a target platform.

## Pin Layout when connecting Probe head Board

(Only CN-A when connecting a probe head cable)



■ Circuit required for User's Target System



SDI Interface Connector (YL600 YDC standard)

SDI-2 Interface Connection (YL600 YDC standard)

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