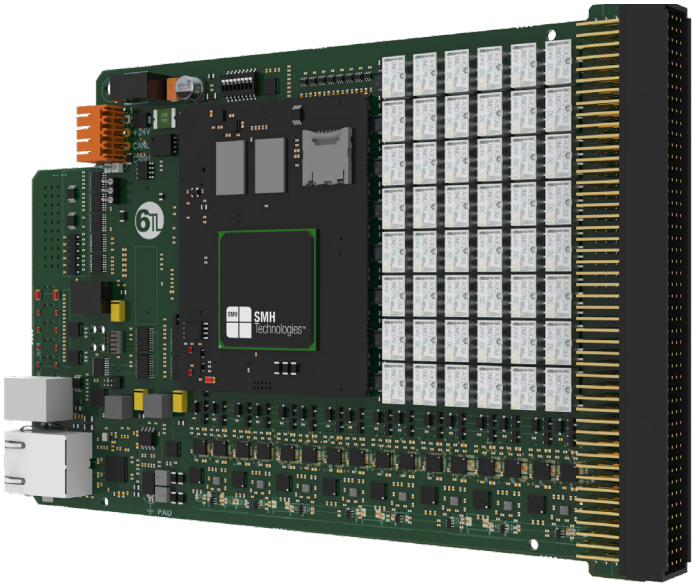
YAV90FR2 FlashRunner

8-sites flash programmer with relay barrier, true parallel channels



- 8-sites universal flash programmer
- SMH FlashRunner 2.0
- True parallel and independent
- Relay barrier integrated
- RCV module
  (Virginia Panel and MacPanel versions available)
- CAN Bus or Ethernet control
- Phi6 environment compatible

The YAV90FR2 or YAM90FR2 is a flash programmer housed in a compact 6TL YAV Module form factor, designed for seamless integration into automated test environments. It incorporates the advanced FlashRunner 2.0 technology by SMH, enabling efficient programming of microcontrollers, flash memory, and other logic or memory devices.

The module features flexible connectivity options, with all digital I/O (DIO), programmable voltage lines, and corresponding ground lines switchable via integrated relays.

The YAV90FR2 can be used via CAN Bus or Ethernet and is featured with software interfacing libraries, allowing users to achieve a full integration inside their software and across different frameworks, such as LabView© and Visual C / C++.

The YAV90FR2 integrates a mass interconnect solution (Virginia Panel and MacPanel available) enabling to reduce the wiring between the flash programmer and the DUT.

Order information

	Part number	Supply contents
Flash programmers	YAV90FR2	8-sites flash programmer with relay barrier, true parallel channels, CAN and Ethernet control, Virginia Panel
	YAM90FR2	8-sites flash programmer with relay barrier, true parallel channels, CAN and Ethernet control, MacPanel
Driver license	ET445	FlashRunner 2.0 standard programming algorithm
ITA connectors	510151015	Module ITA Q signal 192 position
	561896	Module, ITA, signal, 200 position, 1 mm discrete

Features

Parameters	Symbol	Condition	Min	Typ	Max
Power input connector					
Supply voltage			16V		25V
Supply current					5A
Power consumption					120W
ISP connection					
Input low voltage on DIO	V_{IL}				$0,3V_{PROG0}$
Input high voltage on DIO	V_{IH}	Configured as digital lines	$0w,3V_{PROG0}$		
Output low voltage on DIO	V_{OL}	Configured as digital lines V_{PROG0} = 3.3V, I_{OL} = 24mA			0,55V
Output high voltage on DIO	V_{OH}	Configured as digital lines V_{PROG0} = 3.3V, I_{OL} = -24mA	2,56V		
Output low voltage on DIO	V_{OL}	Configured as digital lines V_{PROG0} = 5V, I_{OL} = 32mA			0,55V
Output high voltage on DIO	V_{OH}	Configured as digital lines V_{PROG0} = 5V, I_{OL} = 32mA	3,9V		
V_{PROG0} output voltage	V_{PROG0}		1,65V		5,5V
V_{PROG0} output current	I_{PROG0}				200mA
V_{PROG1} output voltage	V_{PROG1}		5,5V		13,5V
V_{PROG1} output current	IPROG1				300mA
Rise time on DIO lines	tRISE	Configured as DO push-pull, V_{PROG0} = 1,8V Load: 2kΩ/15pF	2,1ns		15,5ns
		Configured as DO push-pull, V_{PROG0} = 3,3V Load: 2kΩ/15pF	0,7ns		5,8ns
		Configured as DO push-pull, V_{PROG0} = 5V Load: 2kΩ/15pF	0,7ns		4,4ns
Fall time on DIO lines	tFALL	Configured as DO push-pull, V_{PROG0} = 1,8V Load: 2kΩ/15pF	2ns		12,6ns
		Configured as DO push-pull, V_{PROG0} = 3,3V Load: 2kΩ/15pF	0,8ns		5ns
		Configured as DO push-pull, V_{PROG0} = 5V Load: 2kΩ/15pF	0,7ns		4ns
Rise time on V_{PROG0} lines	tRISE	V_{PROG0} = 0-1,8V Load: 15Ω/10mF		10ms	
		V_{PROG0} = 0-3,3V Load: 22Ω/10mF		15ms	
		V_{PROG0} = 0-5,5V Load: 22Ω/10mF		20ms	
Fall time on V_{PROG0} lines	t_{FALL}	V_{PROG0} = 1,8-0V Load: 10mF		300ms	
		V_{PROG0} = 3,3-0V Load: 10mF		350ms	
		V_{PROG0} = 5,5-0V Load: 10mF		350ms	
Rise time on V_{PROG1} lines	t_{RISE}	V_{PROG1} = 0-3V Load: 10Ω/1mF		1,3ms	
		V_{PROG1} = 0-5V Load: 47Ω/1mF		1,8ms	
		V_{PROG0} = 0-13,5V Load: 94Ω/1mF		13ms	
Fall time on V_{PROG1} lines	t_{FALL}	V_{PROG1} = 3-0V Load: 1mF		18ms	
		V_{PROG1} = 5-0V Load: 1mF		30ms	
		V_{PROG0} = 13,5-0V Load: 1mF		45ms	