

noForth for MSP430FR5994

The .a43 files in this directory contain binaries for the noForth 5994 variants on the *MSP430FR5994 Launchpad*. The noForth data for clock speed, Baud rate, Uart, etc. are packed in 14 consecutive bytes, the CONFIG data. *When you use other settings or another board, the CONFIG data in the A43-file must be altered:*

1. Choose one of the CONFIG options below.
2. Copy the blue intelhex line and paste it in the binary, overwriting the (third) line that starts with `:0E197200...`
3. Then save the file with an appropriate name.

- MSP430FR5994 Launchpad,
Baud rate 115200, 16MHz, UART-0, switch S?=P5.5
`:0E1972009F0F1048002040020800A1F7FFFF61`
- MSP430FR5994 Launchpad,
Baud rate 115200, 16MHz, UART-1, switch S?=P5.5
`:0E1972009F0F1048062040020800A1F7FFFF5B`
- MSP430FR5994 Launchpad,
Baud rate 115200, 16MHz, UART-2, switch S?=P5.5
`:0E1972009F0F10480C2040020800A1F7FFFF55`
- MSP430FR5994 Launchpad,
Baud rate 115200, 16MHz, UART-3, switch S?=P5.5
`:0E1972009F0F1048122040020800A1F7FFFF4F`

Structure of the CONFIG data for noForth 5994

Example for the MSP430FR5994 Launchpad

Baud rate 115200, 16MHz, UART-0, switch S?=P5.5

`:0E1972009F0F1048002040020800A1F7FFFF61`

	:	Start of intelhex line
	0E	Number of bytes to be written
	19	Destination address (hi-byte)
	72	Destination address (lo-byte)
	00	Record type, must be zero
1972	9F	MS# for MS (lo-byte) \ MS# = (ClockFreq/4000)-1
1973	0F	MS# (hi-byte) \ 16MHz: MS# = 16000000/4000-1 = 3999 = hx 0F9F
1974	10	FRCTL0, FRAM wait states
1975	48	CSCTL1, DCO
1976	00	eUSCI (00=eUSCI0, 06=eUSCI1, C=eUSCI2 12=eUSCI3)
1977	20	Port bit mask for switch S?
1978	40	PxIN, Port address for S? (lo-byte)
1979	02	PxIN, Port address for S? (hi-byte)
197A	08	UCAxBR, (lo-byte) \ Baud rate
197B	00	UCAxBR, (hi-byte) \ Baud rate
197C	A1	UCAxMCTLW, Baudrate modulator (lo-byte)
197D	F7	Baudrate modulator (hi-byte)
197E	FF	Not used
197F	FF	Not used
	61	Checksum, makes the sum of all bytes zero (8 bit)