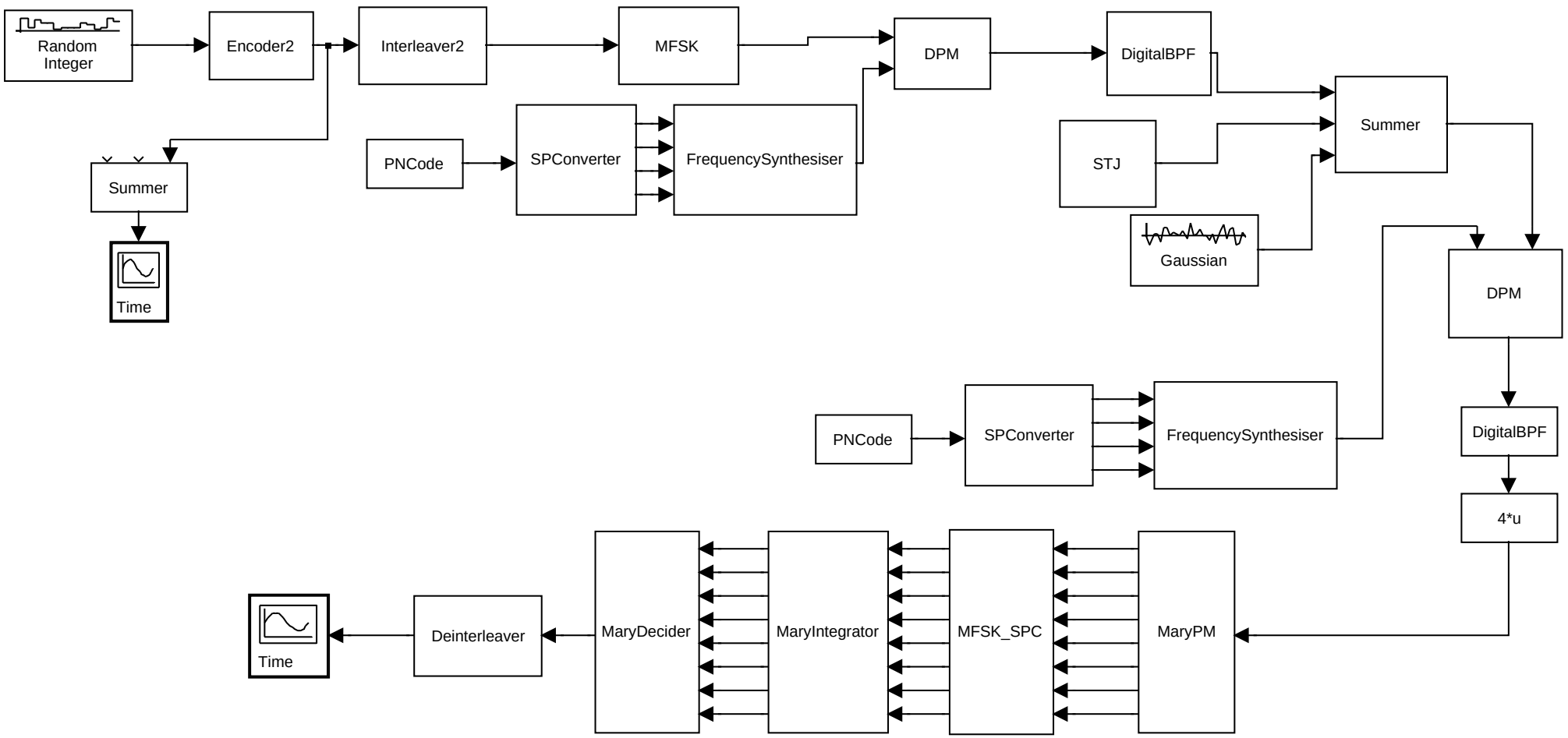
Random Integer
Encoder2
Interleaver2
MFSK
DPM
DigitalBPF
Summer
PNCode
SPConverter
FrequencySynthesiser
STJ
Gaussian
Summer
Time
DPM
PNCode
SPConverter
FrequencySynthesiser
DigitalBPF
4*u
Time
Deinterleaver
MaryDecider
MaryIntegrator
MFSK_SPC
MaryPM

Description of Blocks:

SI	Block Name	Description
1	Random Integer	Random Symbol Generator - Simulink Built In Block
2	Encoder 2	Convolutional Encoder Rate 1/3 - Coded Block
3	Interleaver 2	Convolutional Interleaver - Coded Block
4	MFSK	Generates the M-ary Frequency Shift Keying signal for every symbol duration and tone size M - Coded Block
5	PNCode	Generates the Maximum Length spreading sequence using a Linear Feedback Shift Register - Coded Block
6	SPConverter	Serial to Parallel: Using the serial bits of the spreading sequence, generates a parallel bit vector which is used by the Frequency Synthesizer - Coded Block
7	Frequency Synthesizer	The block generates a single tone signal whose tone is dependent on the input parallel bit vector - Coded Block
8	DPM	Discrete Product Modulator: Frequency hopping/dehopping of the M-ary FSK signals is done by the block - Coded Block.
9	Digital BPF	Band Pass Filter: The Upconverted Frequency hopped M-ary FSK signals are generated by the Band Pass Filter by passing the higher of the two tones at the output of DPM. The BPF implemented is an IIR filter. The IIR filter coefficients are fed as inputs to the block. The passband frequency range & thus IIR filter coefficients are determined by the symbol alphabet size/ FSK tone size M & Frequency Synthesizer output. Currently M = 8. At the receiver, the Upconverted Frequency hopped M-ary FSK signals are converted back to plain M-ary FSK signals by Down conversion - Coded Block
10	STJ	Single Tone Jammer - Coded Block
11	MTJAM	Multi Tone Jammer - Coded Block
12	Pulse Jammer	Pulse Jamming signal - Coded Block
13	MaryPM, MFSK_SPC, MaryIntegrator, MaryDecider	The mentioned blocks in cascaded connection simulate a standard Matched Filter followed by a Maximum Likelihood detector for M-ary FSK - Coded Block
14	Deinterleaver	Convolutional Deinterleaver - Coded Block
15	Gaussian	Gaussian noise generator - Simulink Built In Block
16	Summer	Block that adds the input signals - Coded Block
17	Time	Block used for data display - Simulink Built In Block