ThermalAlgorithm

Data Type	Variable Name	default value	note/description	Required
string	name	""	Defines the name of the algorithm that's getting defined	Yes
string	description	""	Provides a description that can be viewed in the debugger	No
string	outputFile	""	Destination for the .ted file	yes
size_t	outBufferSize	0	Defines the size of the algorithm's output buffer	yes
any pointer	outBuffer	NULL	Contains the output data from the algorithm.	yes
size_t	stepCount	0	defines the number of steps in this algorithm.	yes
ThermalStep *	stepChain	NULL	Contains the step data defining the major algorithmic operations	yes

ThermalStep

Data Type	Variable Name	default value	note/description	Required
string	name	""	provides a name for the step	yes
string	description	""	provides a description for the algorithm	no
size_t	operationCount	0	number of operations in this step	yes
thermalOperation *	operationChain	NULL	a series of operations that define the step's permutations	yes
string	srcFileName	""	the file name that the step came from	yes
int	starting line num	0	the line number in the file that the step is implemented in.	yes
int	ending line numb	0	the final line number in the step	yes

ThermalOperation

Data Type	Variable Name	default value	note/description	Required
string	name	""	defines the name of the operation	Yes
string	description	""	Provides a description that can be viewed in the debugger	No
string	pattern	""	A pattern used to define the change in bits.	yes
size_t	inputCount	0	defines the number of inputs for this operation.	yes
thermalInput *	inputs	NULL	contains an array of input values and data types	yes
size_t	outputCount	0	defines the number of outputs in this operation	yes
thermalOutput *	outputs	NULL	contains an array of output values an data types.	yes

ThermalInput

Data Type	Variable Name	default value	note/description	Required
string	name	""	defines the input name	Yes
string	description	""	Provides a description that can be viewed in the debugger	No
int	dataType	-1	set to equal a macro that defines datatype for switching.	yes
dependent	dataValue	0	defines the actual value of the data, data type depends on the above cell	yes

ThermalOutput

Data Type	Variable Name	default value	note/description	Required
string	name	""	defines the input name	Yes
string	description	""	Provides a description that can be viewed in the debugger	No
int	dataType	-1	set to equal a macro that defines datatype for switching.	yes
dependent	dataValue	0	defines the actual value of the data, data type depends on the above cell	yes