

<https://github.com/PegaSysEng/eth2.0-dafny>

Data collected: 2021-03-02

Files	Folder	Proved
BeaconChainTypes.dfy	src/dafny/beacon	2
Helpers.dfy	src/dafny/beacon	12
AttestationsHelpers.dfy	src/dafny/beacon/attestations	10
AttestationsTypes.dfy	src/dafny/beacon/attestations	0
ForkChoice.dfy	src/dafny/beacon/forkchoice	-1
ForkChoiceHelpers.dfy	src/dafny/beacon/forkchoice	10
ForkChoiceProofs.p.dfy	src/dafny/beacon/forkchoice	6
ForkChoiceTypes.dfy	src/dafny/beacon/forkchoice	0
ForkChoicehelpers.p.dfy	src/dafny/beacon/forkchoice	3
Crypto.dfy	src/dafny/beacon/helpers	1
Math.dfy	src/dafny/beacon/helpers	7
MathHelper.dfy	src/dafny/beacon/helpers/helper_lemmas	20
EpochProcessing.dfy	src/dafny/beacon/statetransition	3
EpochProcessing.s.dfy	src/dafny/beacon/statetransition	6
ProcessOperations.p.dfy	src/dafny/beacon/statetransition	-1
ProcessOperations.s.dfy	src/dafny/beacon/statetransition	-1
StateTransition.dfy	src/dafny/beacon/statetransition	12
StateTransition.s.dfy	src/dafny/beacon/statetransition	7
Validators.dfy	src/dafny/beacon/validators	0
div.i.dfy	src/dafny/libraries/integers	212
div_auto.i.dfy	src/dafny/libraries/integers	13
div_auto_proofs.i.dfy	src/dafny/libraries/integers	6
div_def.i.dfy	src/dafny/libraries/integers	12
div_nonlinear.i.dfy	src/dafny/libraries/integers	11
mod_auto.i.dfy	src/dafny/libraries/integers	21
mod_auto_proofs.i.dfy	src/dafny/libraries/integers	15
mul.i.dfy	src/dafny/libraries/integers	62
mul_auto.i.dfy	src/dafny/libraries/integers	13
mul_auto_proofs.i.dfy	src/dafny/libraries/integers	14
mul_nonlinear.i.dfy	src/dafny/libraries/integers	6
power.i.dfy	src/dafny/libraries/integers	38
power2.i.dfy	src/dafny/libraries/integers	87
power2s.i.dfy	src/dafny/libraries/integers	2
powers.i.dfy	src/dafny/libraries/integers	1
div.r.dfy	src/dafny/libraries/reals	3
mul.r.dfy	src/dafny/libraries/reals	1
Merkleise.dfy	src/dafny/merkle	27
BitListSeDes.dfy	src/dafny/ssz	-1
BitVectorSeDes.dfy	src/dafny/ssz	6
BoolSeDes.dfy	src/dafny/ssz	2
BytesAndBits.dfy	src/dafny/ssz	13
Constants.dfy	src/dafny/ssz	0
IntSeDes.dfy	src/dafny/ssz	4
Serialise.dfy	src/dafny/ssz	8
DafTests.dfy	src/dafny/utils	4
Eth2Types.dfy	src/dafny/utils	4
Helpers.dfy	src/dafny/utils	14
MathHelpers.dfy	src/dafny/utils	14

Folder	#Files	#LoC	Theorems	Implementations	Documentation	#Doc/#LoC (%)	Proved
/src/dafny/merkle	1	502	9	18	158	31	27
/src/dafny/ssz	7	1230	23	20	293	24	32
/src/dafny/utis	8	822	32	16	317	39	48
/test/lowlevel_modules	14	686	3	75	362	53	22