

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

Data collected: 2020-07-15

Files	Folder	#LoC	Theorems	Implementations	Documentation	#Doc/#LoC (%)	Proved	
BeaconChain.dfy	/src/dafny/beacon	13	0	0	67	515	0	
ForkChoice.dfy	/src/dafny/beacon	194	3	12	127	65	15	
Helpers.dfy	/src/dafny/beacon	9	1	0	2	22	1	
StateTransition.dfy	/src/dafny/beacon	173	5	10	204	118	15	
Validators.dfy	/src/dafny/beacon	9	0	0	56	622	0	
Crypto.dfy	/src/dafny/beacon/helpers	5	0	1	3	60	1	
Math.dfy	/src/dafny/beacon/helpers	89	6	1	22	25	0	
MathHelper.dfy	/src/dafny/beacon/helpers/helper_lemmas	652	20	0	11	2	20	
div.r.dfy	/src/dafny/libraries/real	21	3	0	0	0	3	
mul.r.dfy	/src/dafny/libraries/real	9	1	0	0	0	1	
Merkleise.dfy	/src/dafny/merkle	383	9	18	149	39	27	
BitListSeDes.dfy	/src/dafny/ssz	250	7	3	63	25	10	
BitVectorSeDes.dfy	/src/dafny/ssz	132	4	2	36	27	6	
BoolSeDes.dfy	/src/dafny/ssz	20	0	2	3	15	2	
BytesAndBits.dfy	/src/dafny/ssz	88	7	6	44	50	13	
Constants.dfy	/src/dafny/ssz	86	0	0	23	27	0	
IntSeDes.dfy	/src/dafny/ssz	128	2	2	20	16	4	
Serialise.dfy	/src/dafny/ssz	251	3	5	36	14	8	
DafTests.dfy	/src/dafny/utis	47	0	4	25	53	4	
Eth2Types.dfy	/src/dafny/utis	157	4	3	81	52	7	
Helpers.dfy	/src/dafny/utis	229	11	4	69	30	15	
MathHelpers.dfy	/src/dafny/utis	185	10	3	31	17	13	
NativeTypes.dfy	/src/dafny/utis	26	0	0	13	50	0	
NonNativeTypes.dfy	/src/dafny/utis	6	0	0	6	100	0	
SeqHelpers.dfy	/src/dafny/utis	38	6	0	12	32	6	
Merkleise.test.dfy	/test/dafny/merkle	23	0	1	10	43	0	
TestBitlistMerkleise.dfy	/test/dafny/merkle/third_party_implementations	66	0	7	16	24	7	
TestBitvectorMerkleise.dfy	/test/dafny/merkle/third_party_implementations	59	0	7	18	31	7	
TestBytesMerkleise.dfy	/test/dafny/merkle/third_party_implementations	52	0	6	17	33	6	
TestListOfBytes32Merkleise.dfy	/test/dafny/merkle/third_party_implementations	97	2	8	36	37	10	
TestListOfUint64Merkleise.dfy	/test/dafny/merkle/third_party_implementations	76	0	7	15	20	7	
TestVectorOfUint64Merkleise.dfy	/test/dafny/merkle/third_party_implementations	69	0	7	13	19	7	
ThirdPartyMerkleisation.dfy	/test/dafny/merkle/third_party_implementations	19	0	6	0	0	6	
BitListSeDes.tests.dfy	/test/dafny/ssz	14	0	1	7	50	1	
UintSeDes.tests.dfy	/test/dafny/ssz	16	0	1	8	50	1	
StringConversions.dfy	/test/dafny/test_utis	159	1	19	73	46	20	
MathHelpers.tests.dfy	/test/dafny/utis	13	0	1	17	131	1	
CommandLine.dfy	/test/lowlevel_modules	17	0	3	6	35	3	
Rand.dfy	/test/lowlevel_modules	5	0	1	0	0	1	
	TOTAL	2	3885	105	151	1339	34	248

Folder	#Files	#LoC	Theorems	Implementations	Documentation	#Doc/#LoC (%)	Proved
/src/dafny/beam/helpers/helper_lemmas	8	1144	35	24	492	43	52
/src/dafny/beam/helpers/helper_lemmas	3	746	26	2	36	5	21
/src/dafny/beam/helpers/helper_lemmas	1	652	20	0	11	2	20
/src/dafny/libraries/reals	2	30	4	0	0	0	4
/src/dafny/merkle	1	383	9	18	149	39	27
/src/dafny/ssz	7	955	23	20	225	24	43
/src/dafny/utls	7	688	31	14	237	34	45
/test/dafny/merkle/third_party_implementations	8	461	2	49	125	27	50
/test/dafny/merkle/third_party_implementations	7	438	2	48	115	26	50
/test/dafny/ssz	2	30	0	2	15	50	2
/test/dafny/test_utls	1	159	1	19	73	46	20
/test/dafny/utls	1	13	0	1	17	131	1
/test/lowlevel_modules	2	22	0	4	6	27	4