File: compiler_test.(*verifierCircuit)
Type: constraints
Showing nodes accounting for 85220498, 100% of 85235464 total
Dropped 62 nodes (cum <= 426177)

See https://git.io/JfYMW for how to read the graph

frontend
callDeferred[T]
0 of 61841059 (72.55%)

61841059

multicommit
(*multicommitter)
commitAndCall
0 of 61841059 (72.55%)

compiler_test
(*verifierCircuit)
Define
0 of 23394405 (27.45%)

23394405

28796713   33044260

gkrapi
(*Circuit)
verify
0 of 28796713 (33.78%)

Build
func2
0 of 33044260 (38.77%)

wizard
(*VerifierCircuit)
Verify
0 of 23394405 (27.45%)

28796713

2098176

4317188

499192   509305   15832381

gkr
Verify
0 of 28796713 (33.78%)

fieldextension
(*koalabearExt4)
Sub
0 of 2098176 (2.46%)

selfrecursion
(*ConsistencyYsUalphaVerifierAction)
RunGnark
0 of 499192 (0.59%)

permutation
(*CheckGrandProductIsOne)
RunGnark
0 of 509305 (0.6%)

vortex
(*VortexVerifierAction)
RunGnark
0 of 15832381 (18.57%)

20601585

498298

15532349

gkr
verifySumcheck
0 of 20601585 (24.17%)

globalcs
(*EvaluationVerifier)
RunGnark
0 of 4317188 (5.07%)

poly
EvaluateUnivariateGnarkExt
0 of 566062 (0.66%)

vortex
GnarkVerify
0 of 15532349 (18.22%)

6422742   14071863

4302768

6467850

gkr
next
0 of 6422742 (7.54%)

gkr
(*eqTimesGateEvalSumcheckLazyClaims)
verifyFinalEval
0 of 14071863 (16.51%)

symbolic
(*ExpressionBoard)
GnarkEvalExt
0 of 4369799 (5.13%)

vortex
GnarkCheckStatementAndCodeWord
0 of 6467850 (7.59%)

6422742

13794511

2143272   919432   1307095

9064499

1093518   5374324

fiat-shamir
(*Transcript)
ComputeChallenge
0 of 6449209 (7.57%)

polynomial
MultiLin
Evaluate
0 of 21963172 (25.77%)

mpts
VerifierAction
RunGnark
0 of 1668995 (1.96%)

symbolic
LinComb
GnarkEvalExt
0 of 2143272 (2.51%)

symbolic
PolyEval
GnarkEvalExt
0 of 919432 (1.08%)

symbolic
Product
GnarkEvalExt
0 of 1307095 (1.53%)

polynomials
GnarkEvalCanonicalExt
0 of 1093518 (1.28%)

polynomials
GnarkEvaluateLagrangeExt
0 of 5374324 (6.31%)

vortex
GnarkCheckLinComb
0 of 9064499 (10.63%)

6449209

21962247

146567   144188   375680   1759262   110008

132548   131073   631101

444090   502730

4718593

4213167

524284

poseidon2_koalabear
(*kbHasher)
Sum
0 of 6449209 (7.57%)

MultiLin
foldScaled
0 of 21962247 (25.77%)

koalagnark
(*API)
SubExt
0 of 653760 (0.77%)

koalagnark
(*API)
AddExt
0 of 2223834 (2.61%)

gnarkutil
ExpExt
0 of 636258 (0.75%)

koalagnark
(*API)
DivExt
0 of 4739735 (5.56%)

polynomials
GnarkEvalCanonicalBatch
0 of 9064243 (10.63%)

6449209

21961047

1355646

345057

960970   526568   485875   4289088   4289280

poseidon2_koalabear
CompressPoseidon2
0 of 6449209 (7.57%)

scs
(*builder[T])
MulAcc
0 of 21961397 (25.77%)

koalagnark
(*API)
MulExt
0 of 9834569 (11.54%)

koalagnark
(*API)
AssertIsEqualExt
0 of 927652 (1.09%)

koalagnark
(*API)
SumExt
0 of 4817964 (5.65%)

koalagnark
(*API)
MulByFpExt
0 of 4289792 (5.03%)

6425395

108604

524540   17834496

653760   705457   2223834   2115342   2098176   7013770

4213167   526568

927652   4817964   4289792

poseidon2_koalabear
(*permutation)
Permutation
0 of 6425395 (7.54%)

fieldextension
(*koalabearExt4)
Inverse
0 of 19932672 (23.39%)

fieldextension
(*koalabearExt4)
Mul
0 of 26225292 (30.77%)

fieldextension
(*koalabearExt4)
Add
0 of 2622684 (3.08%)

koalagnark
(*API)
e2Sub
0 of 738499 (0.87%)

koalagnark
(*API)
e2Add
0 of 2182465 (2.56%)

koalagnark
(*API)
e2Mul
0 of 7013770 (8.23%)

fieldextension
(*koalabearExt4)
AssertIsEqual
0 of 2098192 (2.46%)

koalagnark
(*API)
AssertIsEqual
0 of 927652 (1.09%)

koalagnark
(*API)
Sum
0 of 4817964 (5.65%)

koalagnark
(*API)
e2MulByFp
0 of 4289792 (5.03%)

1849261   2973117   534339   1068678   9259167

4196372   524540

3146768   18882138

4196386

653760   705457

2223834   2115342

3237929   2764048

2098192   4289792   927652

1011793

738499

2182465

7013770

4817964

poseidon2_koalabear
(*permutation)
matMulExternalInPlace
0 of 1849261 (2.17%)

poseidon2_koalabear
(*permutation)
addRoundKeyInPlace
0 of 534339 (0.63%)

poseidon2_koalabear
(*permutation)
matMulInternalInPlace
0 of 2973117 (3.49%)

poseidon2_koalabear
(*permutation)
sBox
0 of 1068678 (1.25%)

fieldextension
(*koalabearExt2)
Sub
0 of 5244944 (6.15%)

fieldextension
(*koalabearExt2)
Mul
0 of 18882138 (22.15%)

fieldextension
(*koalabearExt2)
Add
0 of 6819070 (8.00%)

koalagnark
(*API)
Sub
0 of 2404052 (2.82%)

koalagnark
(*API)
Add
0 of 7715079 (9.05%)

koalagnark
(*API)
Mul
0 of 7202529 (8.45%)

scs
(*builder[T])
AssertIsEqual
0 of 3030876 (3.56%)

1044901   767256   1068678

5244944   3671315   8916248   2404052

6294575   6819070   7715079

3237929

12702230

2205861   534339

poseidon2_koalabear
(*permutation)
matMulM4InPlace
0 of 1044901 (1.23%)

scs
(*builder[T])
Sub
0 of 12310773 (14.44%)

scs
(*builder[T])
Mul
0 of 26681434 (31.30%)

scs
(*builder[T])
addPlonkConstraint
3036524 (3.56%)

804360

1044901

12310773

26681434

2098176

19932672

3030876

4817964

scs
(*builder[T])
Add
0 of 55502540 (65.12%)

scs
(*builder[T])
splitProd
0 of 26681434 (31.30%)

55502540

26681434

scs
(*builder[T])
splitSum
0 of 55502540 (65.12%)

scs
(*builder[T])
addMulGate
26681434 (31.30%)

55502540

scs
(*builder[T])
addAddGate
55502540 (65.12%)

fieldextension
(*koalabearExt4)
Sub
0 of 2098176 (2.46%)

logderivarg
randLinearCombinationExt
0 of 4720912 (5.54%)

4720912

2098176

8168661