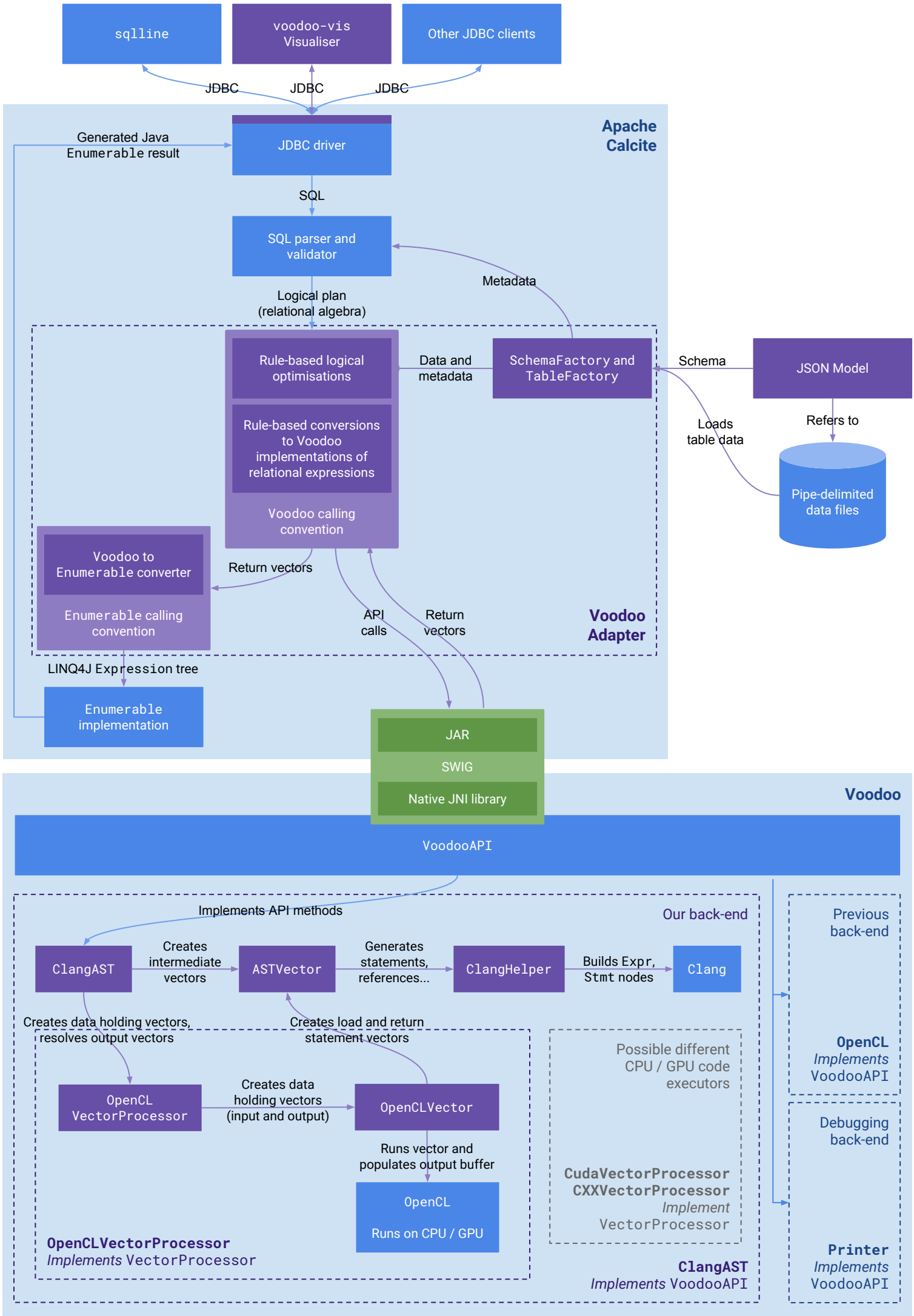
sqlline
voodoo-vis Visualiser
Other JDBC clients
JDBC
JDBC
JDBC
Apache Calcite
Generated Java Enumerable result
JDBC driver
SQL
SQL parser and validator
Metadata
Logical plan (relational algebra)
Rule-based logical optimisations
Data and metadata
SchemaFactory and TableFactory
Schema
JSON Model
Loads table data
Refers to
Pipe-delimited data files
Rule-based conversions to Voodoo implementations of relational expressions
Voodoo calling convention
Voodoo to Enumerable converter
Return vectors
Enumerable calling convention
API calls
Return vectors
Voodoo Adapter
LINQ4J Expression tree
Enumerable implementation
JAR
SWIG
Native JNI library
Voodoo
VoodooAPI
Implements API methods
Our back-end
ClangAST
Creates intermediate vectors
ASTVector
Generates statements, references...
ClangHelper
Builds Expr, Stmt nodes
Clang
Creates data holding vectors, resolves output vectors
Creates load and return statement vectors
OpenCL VectorProcessor
Creates data holding vectors (input and output)
OpenCLVector
Runs vector and populates output buffer
OpenCL
Runs on CPU / GPU
OpenCLVectorProcessor
Implements VectorProcessor
Possible different CPU / GPU code executors
CudaVectorProcessor
CXXVectorProcessor
Implement VectorProcessor
ClangAST
Implements VoodooAPI
Previous back-end
OpenCL
Implements VoodooAPI
Debugging back-end
Printer
Implements VoodooAPI