

Channel Compiler

Deterministic legal-profile optimizer over supplied lane/rate/modulation/FEC/EQ capabilities, service constraints, scoring and fallback generation.

IP-4277 · Engineering software · Software / tooling

Function and architecture

- Deterministic legal-profile optimizer over supplied lane/rate/modulation/FEC/EQ capabilities, service constraints, scoring and fallback generation.
- Evaluation and enterprise licensing
- Controlled release and integration scope

Integration summary

Channel Compiler: Deterministic legal-profile optimizer over supplied lane/rate/modulation/FEC/EQ capabilities, service constraints, scoring and fallback generation. Delivered as Software / tooling. Integrate the selected version at its documented input/output boundary; retain source and configuration identity with each result. The exact callable API, dependencies and runtime environment are supplied with the controlled release; this public description is not a substitute for that release contract.

Technical record

Canonical identity	IP-4277
Responsibility	Deterministic legal-profile optimizer over supplied lane/rate/modulation/FEC/EQ capabilities, service constraints, scoring and fallback generation.
Delivery boundary	Software / tooling
Evidence scope	Engineering software
Engineering boundary	Deterministic legal-profile optimizer over supplied lane/rate/modulation/FEC/EQ capabilities, service constraints, scoring and fallback generation.
Deployment	Software / tooling; 1.0
Operational scope	Generated hardware and third-party tool results require their own exact-release qualification.

Delivery and release binding

- Versioned package and dependency lock
- Deployment environment and access controls

- Input/output schemas and integration examples
- Evaluation scope, support and update policy

Confirm for the selected release: Environment and dependencies, Version / build hash, API compatibility, License and support scope.

Evidence and qualification

The controlled product-release layer includes executable reference surfaces and qualification records. Request the exact selected release bundle.

Generated hardware and third-party tool results require their own exact-release qualification.

Canonical status: P2 / EXECUTABLE PLANNING SOFTWARE; ANALOG PHY MEASUREMENT/COMPLIANCE OPEN

Source basis: Bible v7.42 §112 / §135, IP-4277

Evaluation and licensing

Evaluation: Evaluate the named software release. Production: Team or enterprise deployment. Custom work: Workflow and API integration. Rights, pricing, support and acceptance criteria are agreed for the exact scope.

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