



国家电网公司
STATE GRID
CORPORATION OF CHINA

Chinese communication Protocol progress

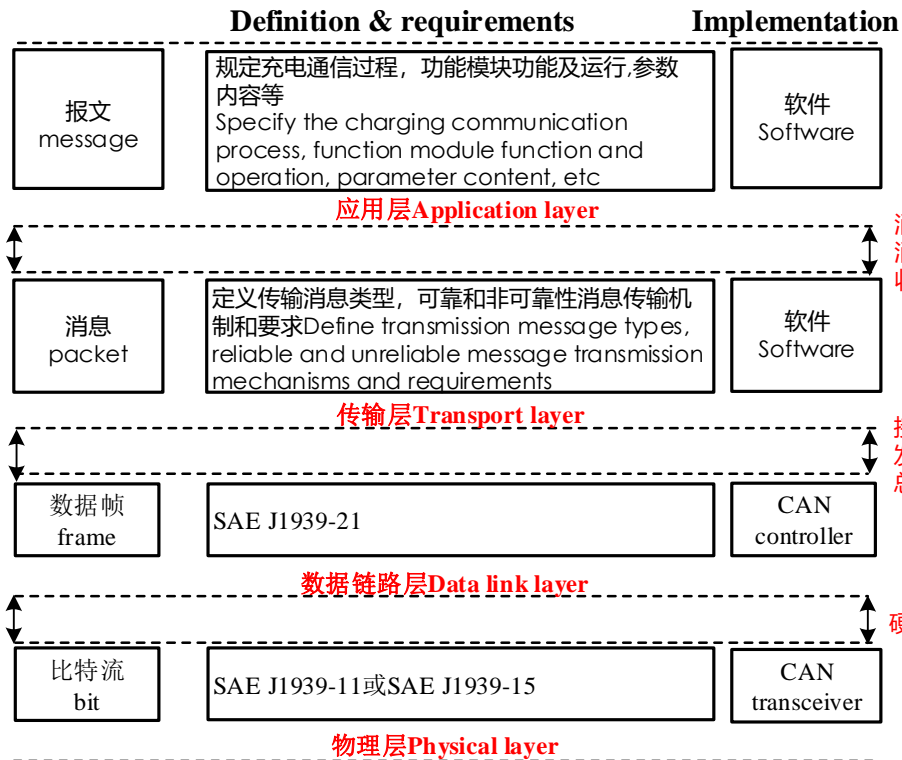
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NARI GROUP
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➤ Part1: GB/T2015 system 第1部分: GB/T2015 系统

- 适用于GB/T2015 system, 支持最大400A充电电流;
Applicable to GB/T2015 system, maximum current: 400A
- 不增加新功能 (如大功率, 放电等) ;
Not new features (such as HPC, bi-directional power transfer, etc.)
- 完成参数定义, 充电流程图的完善, 保持与GB/T18487.1的一致性;
Focus on Improving parameter definition and charging flow chart, be consistent with GB/T18487.1
- 支持车辆电压平台切换功能;
Support voltage platform switching of vehicle



• 分层架构 layered architecture



消息发送
Message receiving Notification
收发状态反馈Receiving and receiving status feedback

接收缓冲区receiving buffer
发送缓冲区sending buffer
总线状态bus status

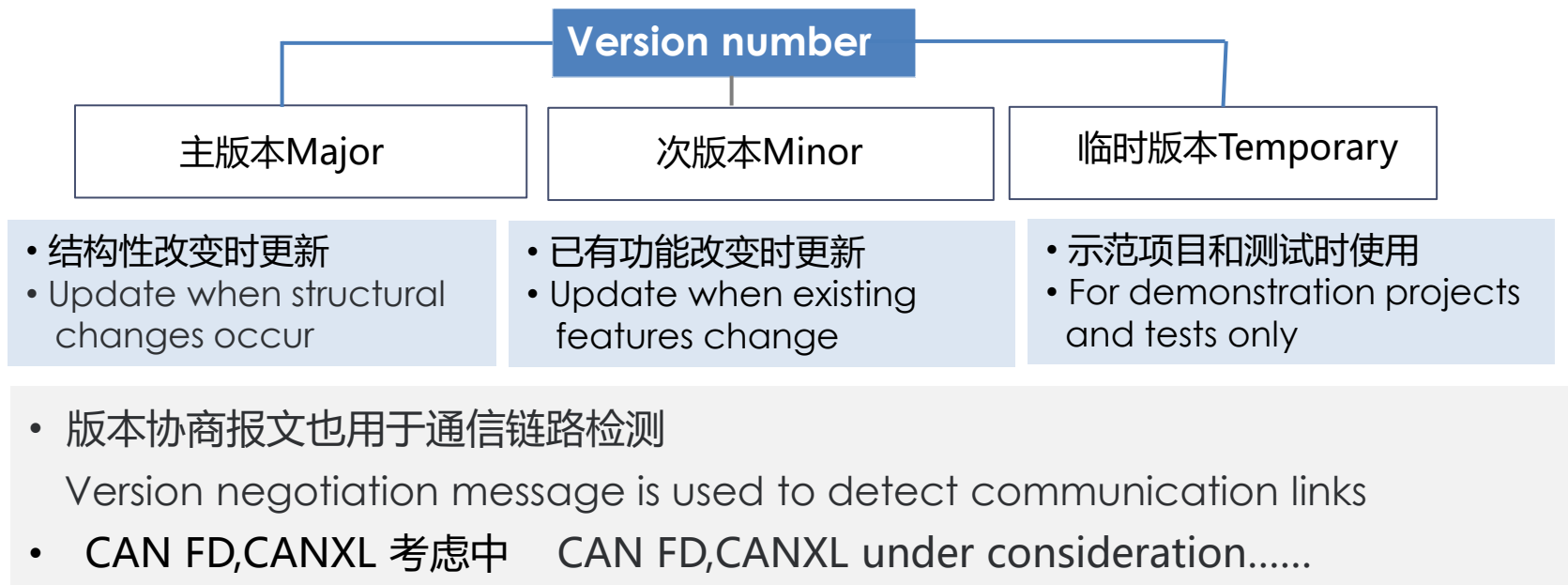
硬线连接hard connection

**明晰分层, 明确各层功能集合
Specify layered architecture
& function set of each layer**

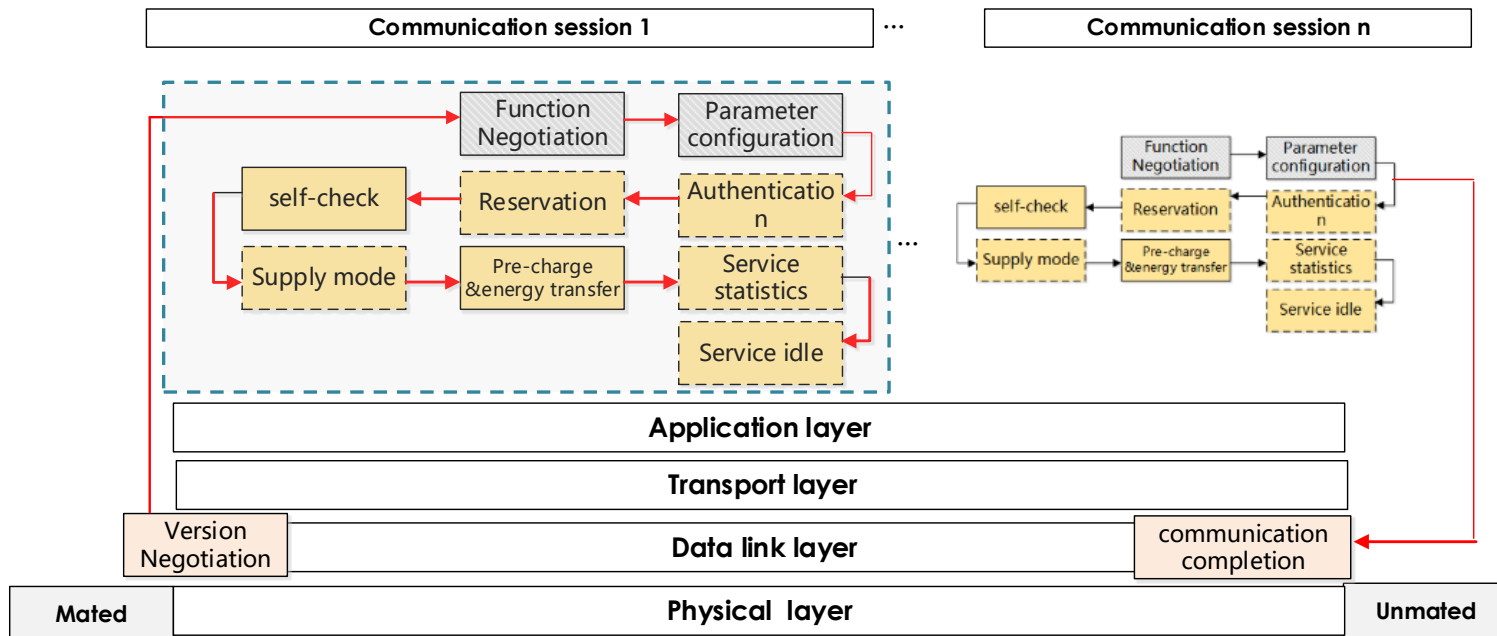
• 版本协商 version negotiation principles

- 框架内的协议遵循统一的版本协商原则，过程；
The protocol within the framework follows the unified version negotiation principle, process;
- 在数据链路层上定义版本协商过程；
The version negotiation process is defined at the data link layer.
- 只有当双方有相同的协议版本号时，版本协商才成功，否则协商失败。
The version negotiation succeeds only when the vehicle & charger follow the same version number.

- 版本协商 version negotiation principles



• 功能模块function module



- 功能模块function module

01

大功率充电HPC

02

即插即充Plug & Charge

03

双向充放电Bi-directional charging

04

有序充电Orderly charging

05

电池加热Battery heating

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- 与国际标准协调 Harmonize with international standards

SAE J1939已经分配统一的节点地址和参数组编号

SAE J1939 has assigned uniform node addresses and PGNs

- 2021812 – Assigned during J1939 DA meeting
 - Global SAs: SECC: 95 and VACC: 96
 - Names/Function IDs: SECC: 89 and VACC:90
 - PGNs reserved:

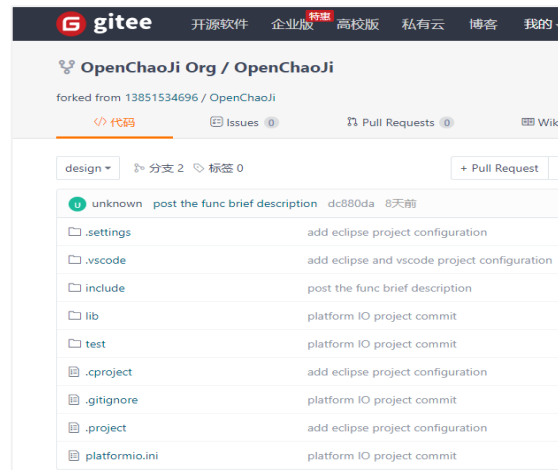
13312	Reserved for future use in GB/T27930	CJLFI
13568	Reserved for future use in GB/T27930	CJSFWI
13824	Reserved for future use in GB/T27930	CJSFOI
14080	Reserved for future use in GB/T27930	CJCFI
14336	Reserved for future use in GB/T27930	CJVGM

SAE J1939 WG minutes

• 开源项目opensource Project

ChaoJi开源项目目前已完成传输层的编码

ChaoJi open source project has completed the coding of the transport layer





Thank you!