

# Compiler Sig 双周例会

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Security Level:



# 议题

- GCC支持龙芯策略讨论：**还在迁移测试中**
  - › 简单介绍openEuler GCC仓目前运作模式
  - › 龙芯适配策略的讨论
- LLVM和clang支持龙芯策略讨论
  - › openEuler当前版本是12.0.1，龙芯目前llvm移植的版本为：8.0.1和11.0.1
  - › 龙芯同事初步反馈人力不够，无法支撑长期维护llvm 12的版本
  - › 是否在openEuler仓上新建llvm11.0.1？以及如何维护？
- **LLVM和clang支持龙芯方案**
  - › 1、在 openEuler 22.03 龙芯架构单独使用 **11.1.0**，其他架构使用 12.0.1 的方案
    - a. 确定提前的全量测试
    - b. Compiler Sig 向 TC 汇报
    - c. 具体的组件：目前涉及LLVM, clang, 后续计划：compiler-rt（时间较早），lld（时间较晚）

# openEuler GCC 社区

- 源码仓: <https://gitee.com/openeuler/gcc>

分支名  
master 默认分支 🔒

分支	GCC 版本
master	10.3

分支名  
master 默认分支 🔒

- 制品仓: <https://gitee.com/src-openeuler/gcc>

分支	类别	GCC 版本
master		10.3
openEuler-22.03	LTS	10.3
openEuler-21.09	innovation	10.3
openEuler-21.03	innovation	9.3
openEuler-20.09	innovation	9.3
openEuler-20.03	LTS	7.3

openEuler-20.03-LTS-SP3 🔒

openEuler-20.03-LTS-SP2 🔒

openEuler-20.03-LTS-SP1 🔒

openEuler-20.03-LTS-Next 🔒

openEuler-20.03-LTS 🔒

openEuler-21.03-perform...

openEuler-21.09 🔒

openEuler-22.03-LTS-Next 🔒

openEuler-20.09 🔒

openEuler-21.03 🔒

HUAWEI

# openEuler GCC 社区

- 源码仓: <https://gitee.com/openeuler/gcc>

- > 模式类似上游GCC社区
- > 存放 GCC 源代码

The screenshot shows the Gitee repository interface for 'openEuler / gcc'. The 'Code' tab is selected. At the top, there are links for Issues (4), Pull Requests (2), Wiki, Statistics, and DevOps. Below the tabs, there are dropdowns for 'master' branch, '分支 1' (1 branch), and '标签 0' (0 tags). There are also buttons for '+ Pull Request', '+ Issue', '文件' (File), 'Web IDE', and '克隆/下载' (Clone/Download). A prominent orange button labeled '克隆/下载' is highlighted. The main area displays a list of recent commits:

提交者	消息	时间
eastb233	[Readme] Add Readme description for GCC repo	c31e751 1个月前
	[Backport] Init GCC 10.3.0 repository	6个月前
	[Backport] Init GCC 10.3.0 repository	6个月前
	[Backport] Init GCC 10.3.0 repository	6个月前
	[Backport] Init GCC 10.3.0 repository	6个月前
	[StructReorderFields] Add Ito and whole-program gate	5个月前
	[Backport] Init GCC 10.3.0 repository	6个月前

# openEuler GCC 社区

- 制品仓: <https://gitee.com/src-openeuler/gcc> (LLVM)

- > 用于构建 openEuler repo 源
- > 存放 GCC 源码压缩包 + patch + gcc.spec 构建脚本

The screenshot shows the Gitee repository page for `src-openEuler / gcc`. The repository has 14 branches and 6 tags. There is 1 pull request and 2 issues. The repository is managed using Web IDE. Below is a list of recent commits:

提交者	消息	时间
eastb233	[SPEC] Delete gdb/auto-load folder ownership	432628c 19天前
	0001-libquadmath-Enable-libquadmat...	[Sync] Sync patch from openeuler/gcc 6个月前
	0002-Backport-cselim-Extend-to-chec...	[Sync] Sync patch from openeuler/gcc 6个月前
	0003-version-Set-version-to-10.3.1.pat...	[Sync] Sync patch from openeuler/gcc 6个月前
	0004-Backport-tree-optimization-Avoi...	[Sync] Sync patch from openeuler/gcc 6个月前
	0005-Backport-tree-optimization-Fix-l...	[Sync] Sync patch from openeuler/gcc 6个月前
	0006-simdmath-Enable-simdmath-on-...	[Sync] Sync patch from openeuler/gcc 6个月前
	0007-Vect-Enable-skipping-vectorizati...	[Sync] Sync patch from openeuler/gcc 6个月前

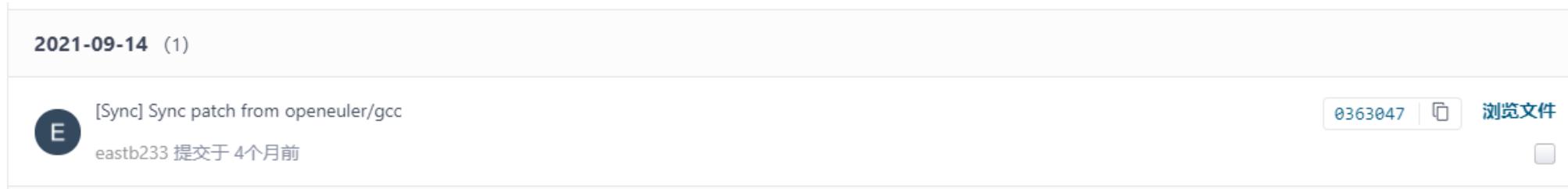
# 日常开发

- 源码仓: <https://gitee.com/openeuler/gcc>
- 在源码仓提交 issue
  - > 主要描述需要解决的问题和设计方案
- fork 源码仓开发特性代码
  - > 需要 fork 到 gitee 个人账号的仓进行开发
- 提交 PR 申请合入 GCC 仓
  - > 在 PR 中简要描述一下开发者测试的内容 (门禁在持续集成当中)
  - > commit message 格式主要如下

[Module]	.Title	commit 85740d3cc56fda699beae689b5d73233d16097af Author: bule <bule1@huawei.com> Date: Thu Jul 8 11:52:47 2021 +0800
Description		[libquadmath] Enable libquadmath on kunpeng  This enable libquadmath on kunpeng platform to convenient users that migrating from x86 platform. libquadmath uses "__float128" as quad precision floating point type and with math functions with "q" suffix like "cosq". For those who do not need to adapt to x86 platform, you can use "long double" as quad precision floating point type and math functions with "l" suffix like "cosl" in libm for quad precision math.

# Patch 同步

- 定期会从 源码仓 向 制品仓 同步 patch



# Thank you.

把数字世界带入每个人、每个家庭、  
每个组织，构建万物互联的智能世界。

Bring digital to every person, home and  
organization for a fully connected,  
intelligent world.

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