



# Security Assessment



# ether.fi - Cash Module Combined Audit Report

November 2025

Prepared for ether.fi

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# Project Summary

## Project Scope

Project Name	Initial Commit Hash	Latest Commit Hash	Platform	Start Date	End Date
Pix Wallet Auto Topup	<a href="#">18d963d</a>	<a href="#">a643d24f2</a>	EVM	16/11/2025	17/11/2025
Settlement Dispatcher V2	<a href="#">6efc2b47d</a>	<a href="#">6efc2b47d</a>	EVM	27/11/2025	28/11/2025

## Project Overview

This document describes the manual code review of several modules and changes to the cash-v3 repository.

The work was a 2 day effort undertaken between **16/11/2025** and **28/11/2025**

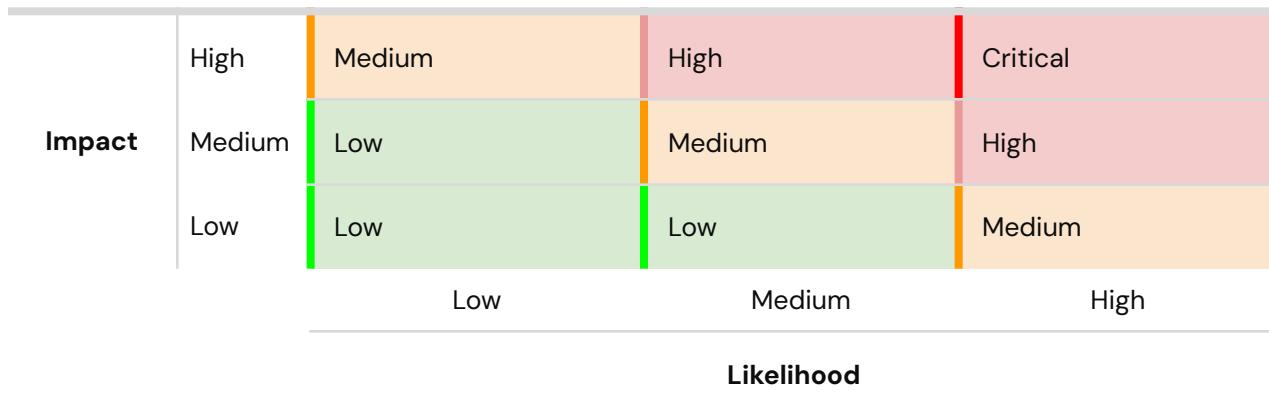
The team performed a manual audit of the Solidity smart contracts. During the manual audit, the Certora team discovered bugs in the Solidity smart contracts code, as listed on the following page.

## Findings Summary

The table below summarizes the findings of the review, including type and severity details.

Severity	Discovered	Confirmed	Fixed
Critical	-	-	-
High	-	-	-
Medium	-	-	-
Low	-	-	-
Informational	3	3	2
<b>Total</b>	<b>3</b>	<b>3</b>	<b>2</b>

## Severity Matrix



## Detailed Findings

ID	Title	Severity	Status
<b>Pix Wallet Auto Topup</b>			
I-01	Redundant MAX_ROLE function	Info	Acknowledged
I-02	Test coverage can be improved	Info	Fixed
I-03	No event emitted when pix wallet is updated	Info	Fixed
<b>Settlement Dispatcher V2</b>			
-	-	-	-

# Pix Wallet Auto Topup

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## Project Overview

This report presents the findings of a manual code review for the **Pix Wallet Auto Topup** audit within the **EtherFi Cash** project. The work was undertaken between **November 16th** and **November 17th 2025**

The following contract list is included in the scope of this audit:

- src/pix-auto-topup/PixWalletAutoTopup.sol

The code modifications examined during this review were implemented in the following pull request - [PR#72](#)

## Informational Issues

### I-01. Redundant MAX\_ROLE function

**Description:** The `MAX_ROLE` function is unnecessary as it currently returns the `type(uint256).max`. However, based on Solady's documentation:

JavaScript

```
/// This implementation performs a self-staticcall to `MAX_ROLE()` to determine
/// the maximum role that can be set/unset. If the inheriting contract does not
/// have `MAX_ROLE()`, then any role can be set/unset.
```

Therefore, this function can be removed, as it does not enforce any limitations.

**Recommendations:** Consider removing the `MAX_ROLE` function.

**Customer's response:** Acknowledged

**Fix Review:** Acknowledged



## I-02. Test coverage can be improved

**Description:** The following tests are missing:

- `_authorizeUpgrade` has not been tested that the `onlyOwner` modifier works.
- Missing tests for `MAX_ROLE()`
- Missing test for `bridgeViaCCTP` when `amount > balance`

**Recommendation:** Consider adding the missing tests in order to improve the coverage.

**Customer's response:** Fixed in commit [a643cd24f2](#)

**Fix Review:** Fixed



### I-03. No event emitted when pix wallet is updated

**Description:** The `setPixWalletOnBase()` function is used to change the address of the destination wallet. It is a good practice to emit events when configuration is updated. However there is [no event emitted](#) after the update.

**Recommendation:** Emit an event when the wallet is changed

**Customer's response:** Fixed in commit [a643d24f2](#)

**Fix Review:** Fixed

# Settlement Dispatcher V2

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## Project Overview

This report presents the findings of a manual code review for the **Settlement Dispatcher V2** audit within the **EtherFi Cash** project. The work was undertaken between **November 27th** and **November 28th 2025**

The following contract list is included in the scope of this audit:

- src/modules/cash/CashModuleCore.sol
- src/modules/cash/CashModuleSetters.sol
- src/modules/cash/CashModuleStorageContract.sol
- src/settlement-dispatcher/SettlementDispatcherV2.sol

The code modifications examined during this review were implemented in the following pull request - [PR#73](#)

## Disclaimer

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Even though we hope this information is helpful, we provide no warranty of any kind, explicit or implied. The contents of this report should not be construed as a complete guarantee that the contract is secure in all dimensions. In no event shall Certora or any of its employees be liable for any claim, damages, or other liability, whether in an action of contract, tort, or otherwise, arising from, out of, or in connection with the results reported here.

## About Certora

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Certora is a Web3 security company that provides industry-leading formal verification tools and smart contract audits. Certora's flagship security product, Certora Prover, is a unique SaaS product that automatically locates even the most rare & hard-to-find bugs on your smart contracts or mathematically proves their absence. The Certora Prover plugs into your standard deployment pipeline. It is helpful for smart contract developers and security researchers during auditing and bug bounties.

Certora also provides services such as auditing, formal verification projects, and incident response.