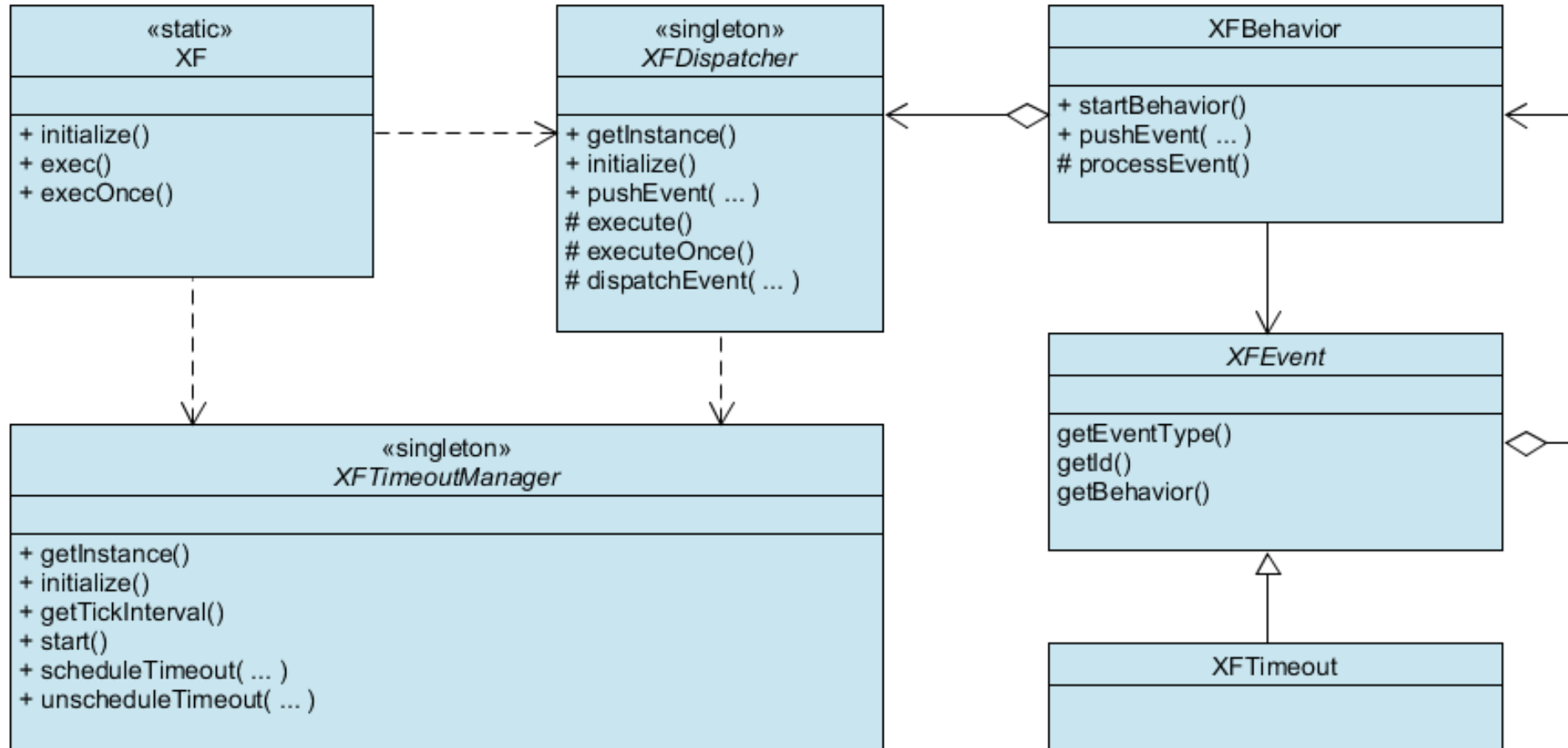# XF – Laboratory Introduction

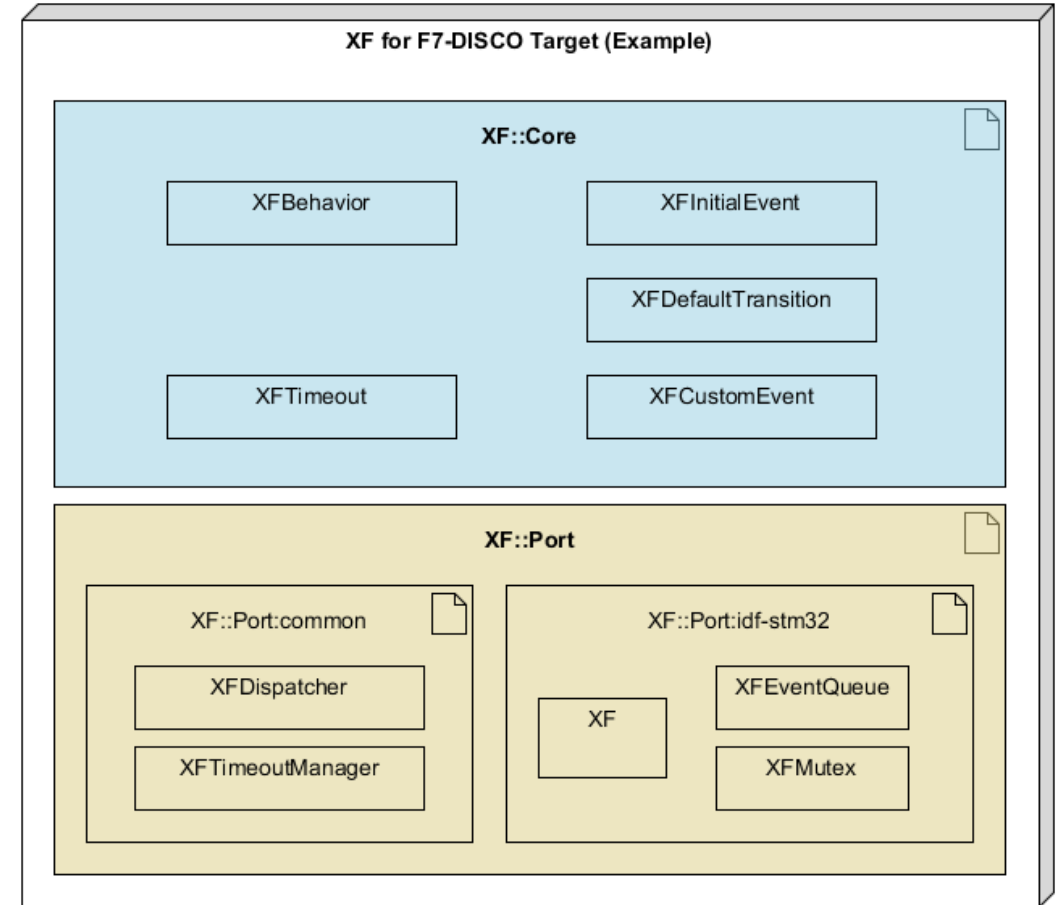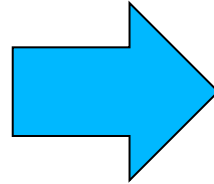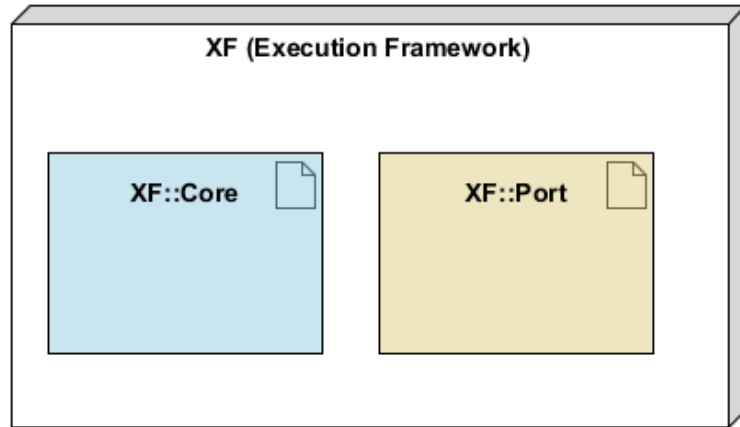Medard Rieder
Thomas Sterren
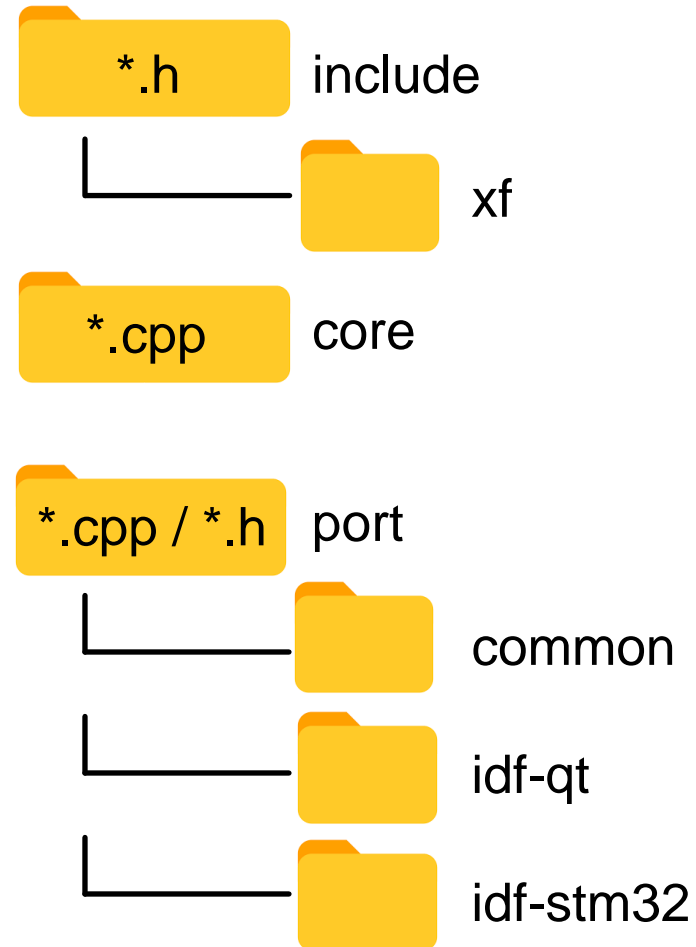
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XF – Class Diagram – Simplified

XF – Core and Port

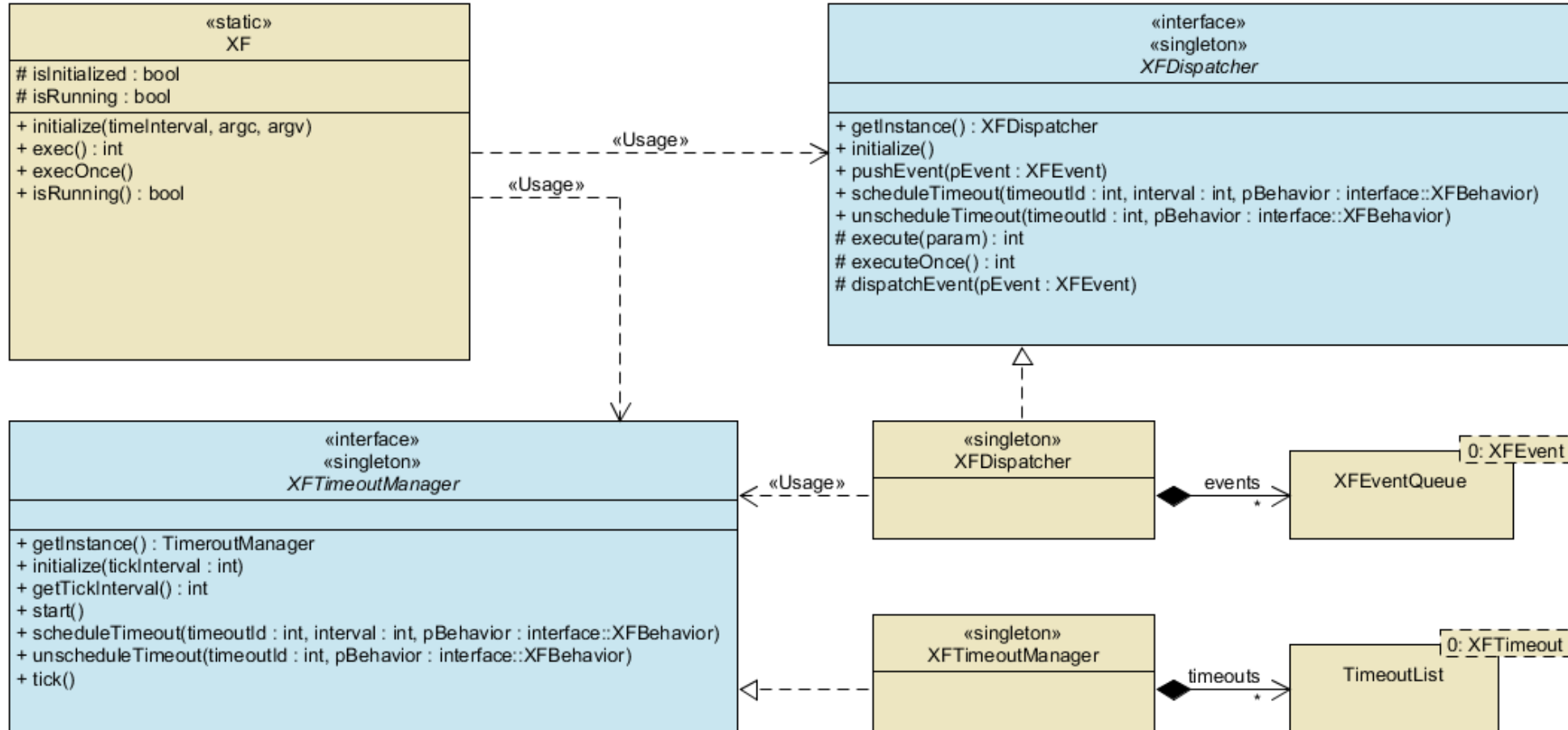To build an XF the Core component and a Port component is needed

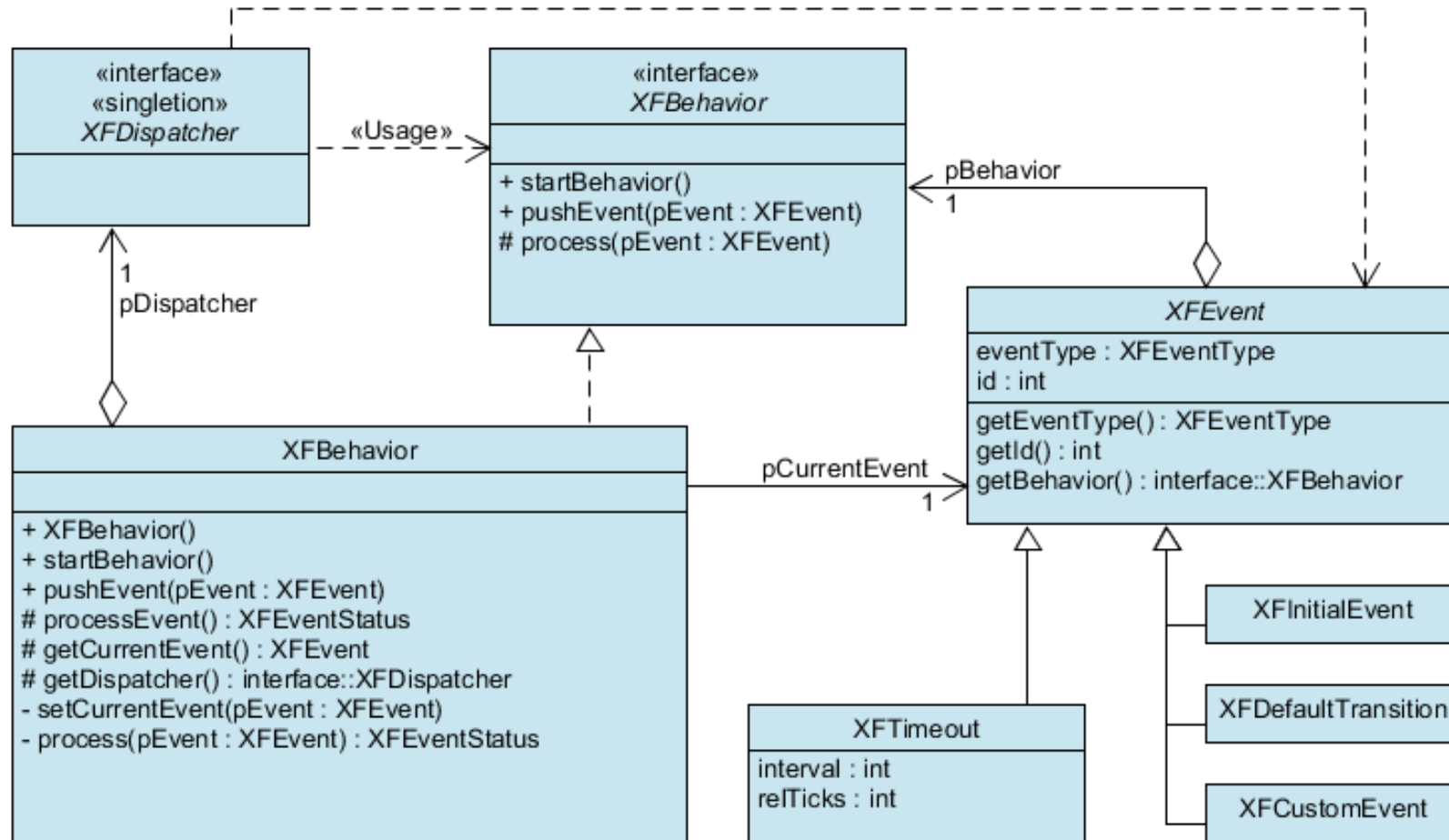Example: IDF on an F7-DISCO board

XF – Folder Structure

XF – Class Diagram – Detail 01

«static»
XF

\# isInitialized : bool
\# isRunning : bool

+ initialize(timeInterval, argc, argv)
+ exec() : int
+ execOnce()
+ isRunning() : bool

«interface»
«singleton»
XFDispatcher

+ getInstance() : XFDispatcher
+ initialize()
+ pushEvent(pEvent : XFEvent)
+ scheduleTimeout(timeoutId : int, interval : int, pBehavior : interface::XFBehavior)
+ unscheduleTimeout(timeoutId : int, pBehavior : interface::XFBehavior)
\# execute(param) : int
\# executeOnce() : int
\# dispatchEvent(pEvent : XFEvent)

«Usage»
«Usage»

«interface»
«singleton»
XFTimeoutManager

+ getInstance() : TimeroutManager
+ initialize(tickInterval : int)
+ getTickInterval() : int
+ start()
+ scheduleTimeout(timeoutId : int, interval : int, pBehavior : interface::XFBehavior)
+ unscheduleTimeout(timeoutId : int, pBehavior : interface::XFBehavior)
+ tick()

«singleton»
XFDispatcher

«Usage»

events

0: XFEvent
XFEventQueue

*

«singleton»
XFTimeoutManager

timeouts

0: XFTimeout
TimeoutList

*

XF – Class Diagram – Detail 02

XF – Where to Start

The XF is a framework
The XF does not have `main()` function

Start with the following Qt Creator project
    test-bench/test1/ide-qtcreator-test1-idf/test1-idf.pro

Study the XF and test-bench documentation

Implement the default port classes

Try to build and run *test01*