IoT Convergence with Thread and Project Connected Home over IP

April 21, 2020

THREAD GROUP | Agenda

Introduction

What is Thread

Panel Session

- Thread + Project Connected Home Over IP Vision
- Technical Details
- Product Development

Wrap-up / Call to Action

Audience Q & A

Introduction

THREAD GROUP | Webinar Overview

You will be placed on mute by organizer.

Post your questions at any time during the webinar for the speakers via the Q&A window at the bottom of your screen.

Questions will be read and addressed after the presentation.

A recording of this webinar will be made available on the Thread Group website.

Panelists and Moderator

THREAD GROUP | Panelists and Moderator

Stuart Cheshire
Director, Thread Group
Distinguished Engineer, Apple

Grant Erickson
President, Thread Group
Principal Software Engineer, Google

Arnulf Rupp
Director, Thread Group
Sr. Director Head of Standardization, OSRAM

Klaus Waechter
Director, Thread Group
Standardization Manager, Siemens

Jean-Michel Orsat
Director, Thread Group
CTO, Somfy

Kevin Kraus
Treasurer, Thread Group
Director Technology and Integration Support, Yale

Moderator: Bill Curtis
Resident Analyst
MOOR INSIGHTS & STRATEGY

Overview

What Is Thread?

What is Thread?

Thread is a low power, secure and future-proof mesh networking technology for IoT products.

BUILT FOR IoT

Securely and reliably connect products in homes and buildings

BUILT-IN SECURITY

Provides security at the network layer

LOW ENERGY FOOTPRINT

Based on the power-efficient IEEE 802.15.4 MAC/PHY

OPEN IPv6 BASED PROTOCOL

Provides device-to-device and device-to-cloud connections

SEAMLESS INTEGRATION

Extends the internet into low power end devices

MARKET READY

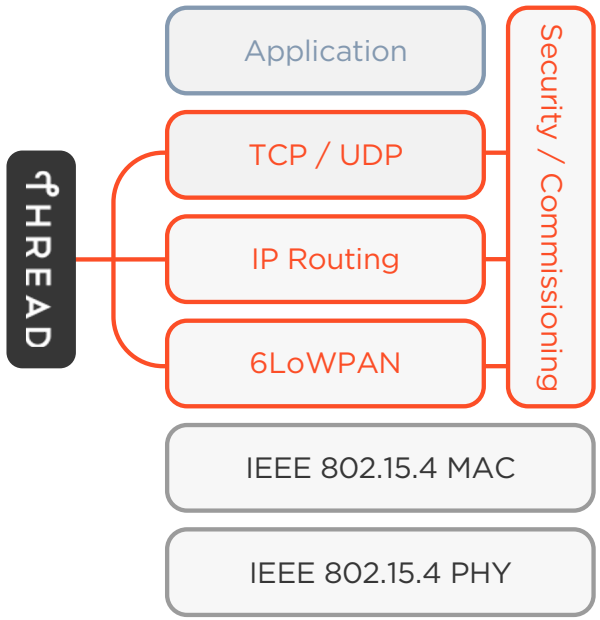
Broad selection of silicon, stacks and components available globally

THREAD GROUP | What Thread Delivers

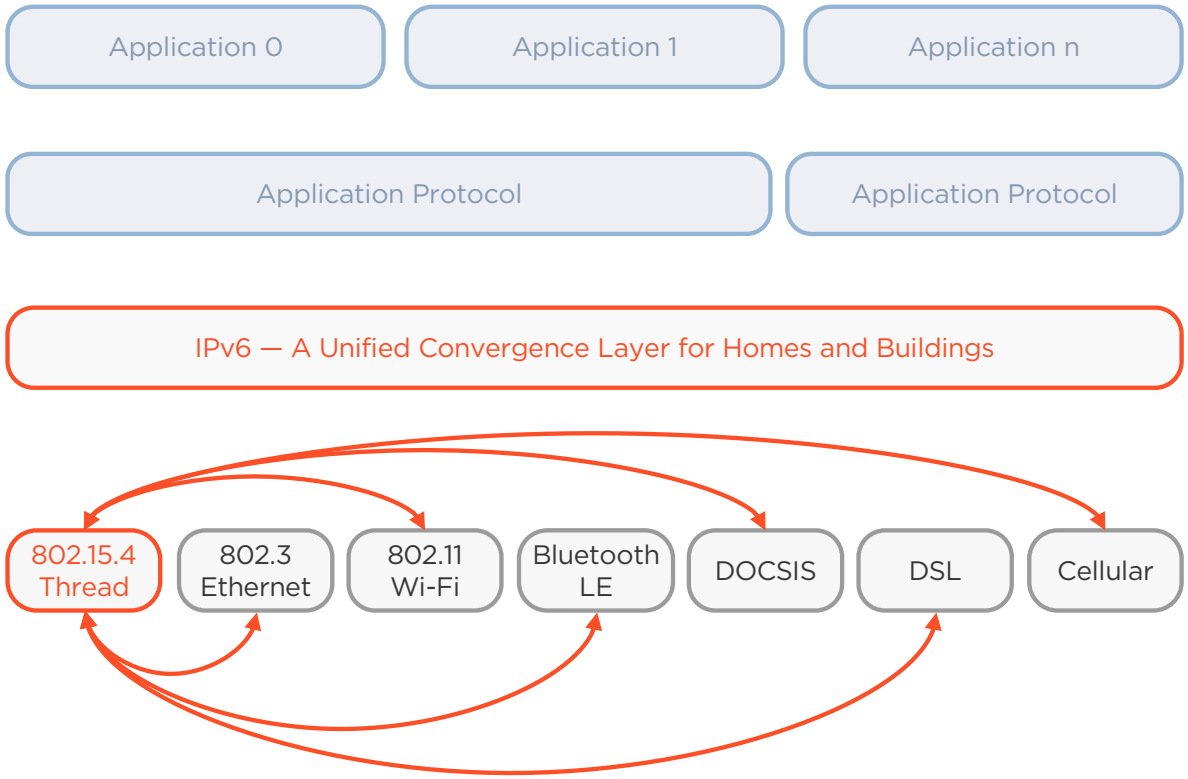
A secure, low power wireless mesh network for connected products in homes and buildings

- Built on proven, widely available and supported technologies
  - Uses IPv6
  - Runs on existing 802.15.4 silicon from multiple providers
- Architected to simply and securely add and remove products, keep communications secret and prove identify
- Tested and trusted to control devices in thousand-person office buildings, simple and affordable enough for a one-room apartment

Thread can support many application layer protocols



THREAD GROUP | Thread Is IP



Unified convergence layer across all networks in the home and commercial buildings

- Reuse software stacks

Enables direct device-to-device, device-to-mobile, and device-to-cloud, and one-to-many communication

- Nodes can communicate directly with each other and with multiple apps or backend services

Support for many application layers

- Any low bandwidth application layer that can run over IPv6 can run over Thread

Problem Statement

THREAD GROUP | Fragmented Silos

Today the consumer Internet of Things space is:

- Fragmented
- Technical silos of incompatible de jure standards

THREAD GROUP | Manufacturer and Partner Costs

Manufacturers and partners lose supporting multiple lightly-differentiated and non-interoperable SKUs

THREAD GROUP | Frustrated Users

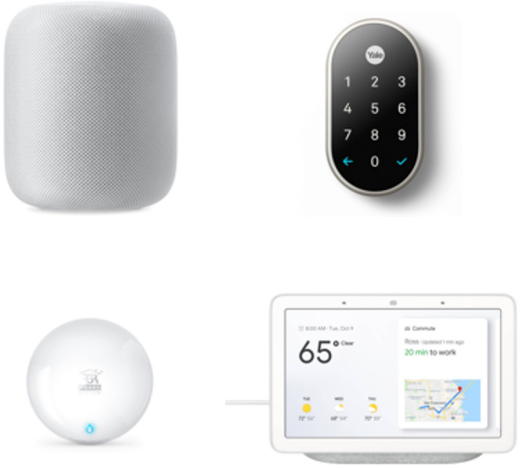
Consumers lose with frustration
and fatigue

THREAD GROUP | Ceiling on Adoption and Growth

These challenges place a ceiling on adoption and growth in this space

THREAD GROUP | Goals

User Experience



Product Adoption

Metaphorical Comparison

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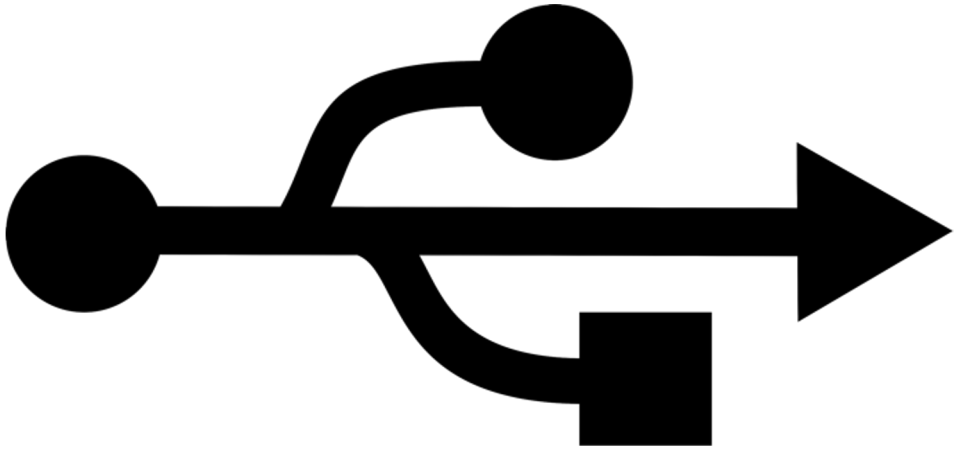
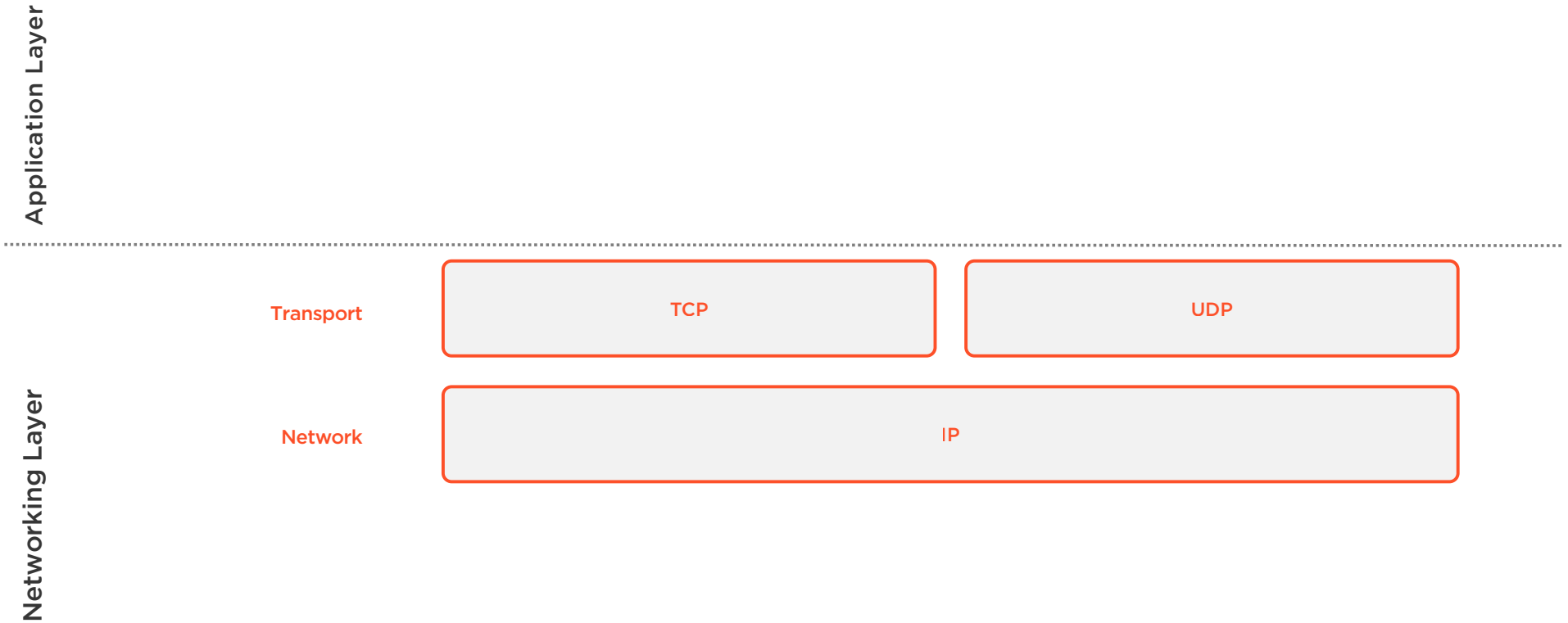


THREAD GROUP | Like USB for the Helpful Home

Any computer, any printer; one plug, no drivers.

3 Steps Towards Convergence

THREAD GROUP | Step 1: IP



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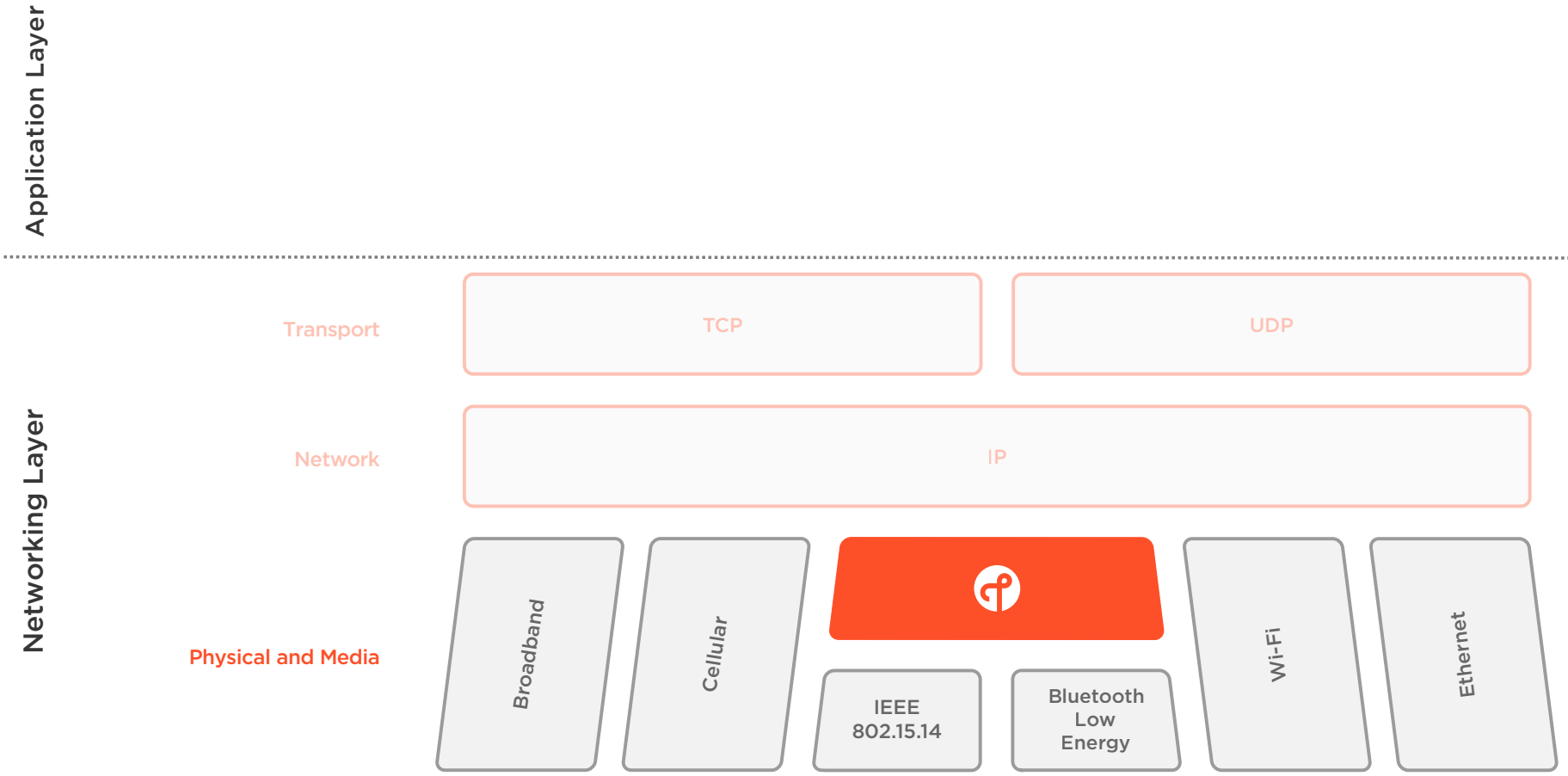
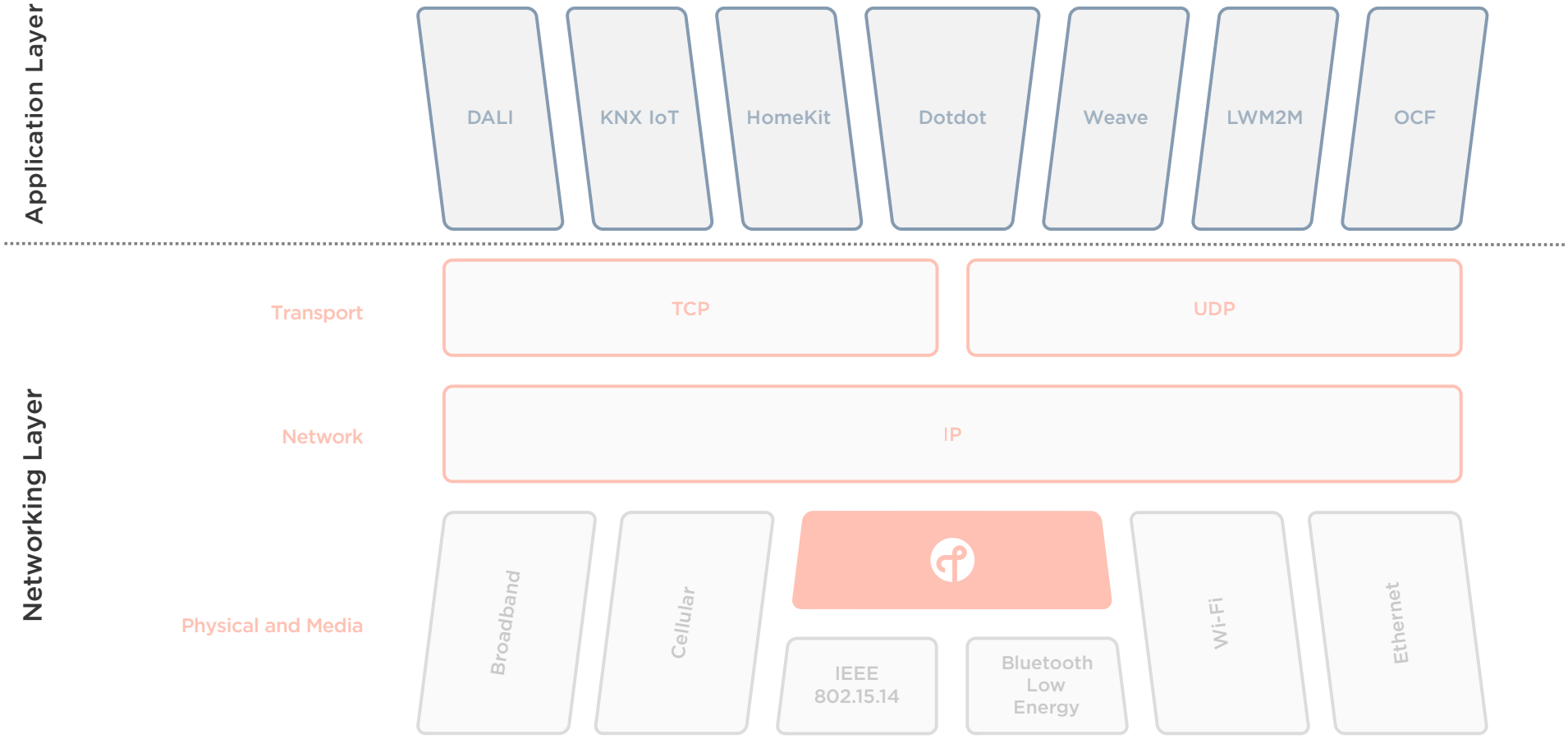
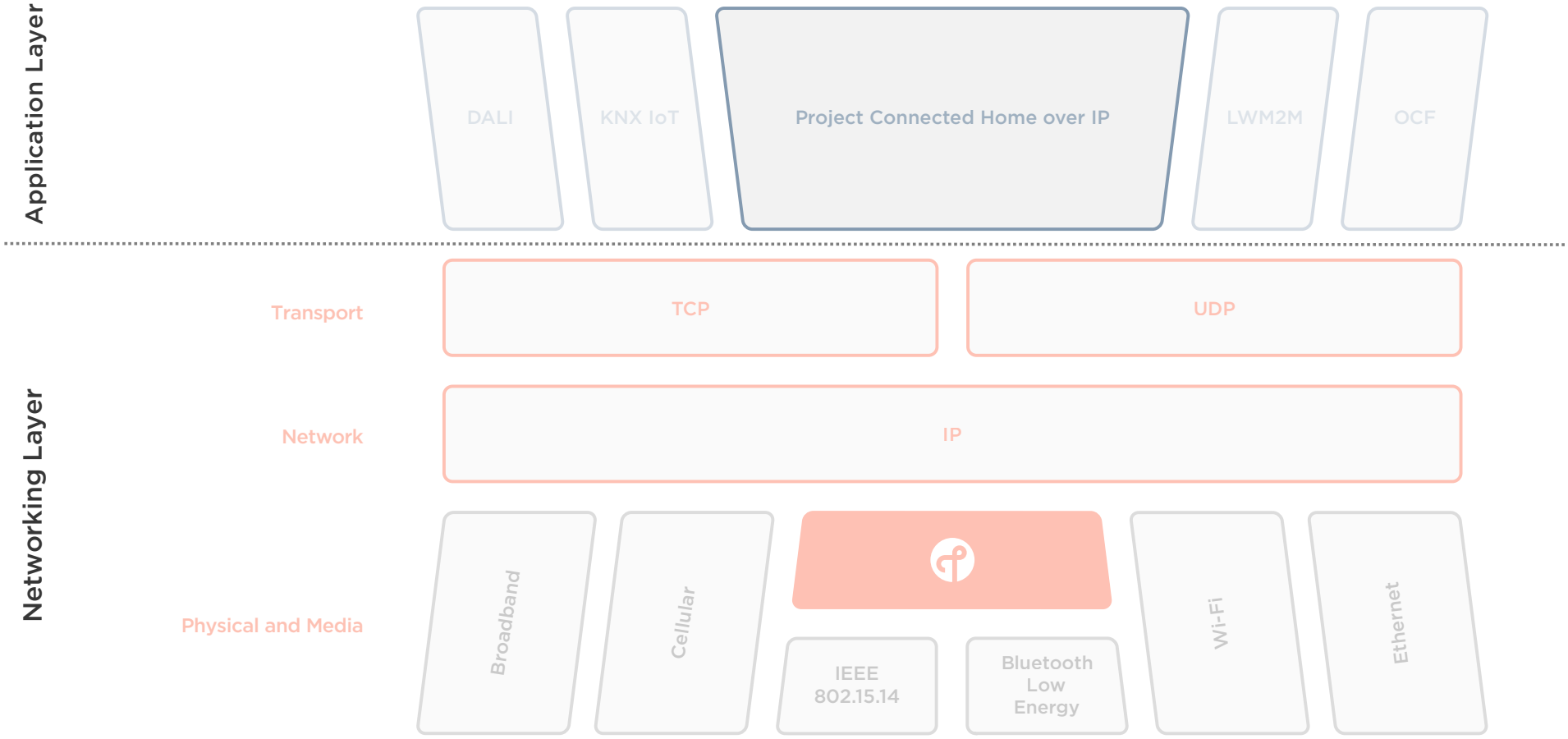
Step 2: Essential Yet Complementary IP-bearing Networks



THREAD GROUP | Step 3: Common Application Layer



THREAD GROUP | Step 3: Common Application Layer



Thread + Project Connected Home over IP Vision Q&A

THREAD GROUP | **Thread + Project Connected Home over IP Vision Q&A**

- Why use Thread for Project CHIP? What is the value proposition?
- What is Thread's relationship with Project CHIP?
- Do we really need "yet another IoT standard?" Why will it succeed?
- How will Project CHIP over Thread simplify things for consumers?
- What are some specific consumer benefits? Will consumers care?
- Will Project CHIP support both consumer and commercial markets? (Thread does)

Technical Details Q&A

THREAD GROUP | Technical Details Q&A

- Does Thread need to change in order to support Project CHIP?
- How will Thread + Project CHIP products be certified?
- How will Project CHIP impact Thread's hardware requirements? (Flash and RAM)

Product Development Q&A

THREAD GROUP | Product Development Q&A

- When will Project CHIP over Thread begin to impact device developers?
- How can developers start making progress today?
- When will we see Thread + Project CHIP certified products on the market?

Wrap-up / Call to Action

THREAD GROUP | Thank You!

Learn more at www.threadgroup.org

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- Reminder: Webinar recording will be posted
- Get started: Smart Home, Commercial, Developer, Case Studies, Resources and Certified Components

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Audience Q & A