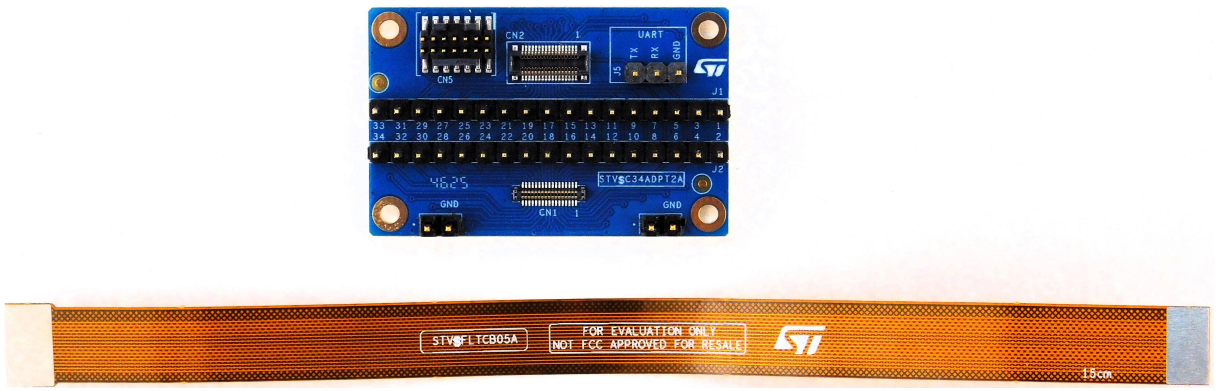
C34 connector breakout expansion board kit

Introduction

The STEVAL-C34ADPTK1 kit includes the STEVAL-C34ADPT2 adapter board and the STEVAL-FLTCB05 flex cable, measuring 15 cm in length, to ensure reliable connections. The kit is designed to enhance connectivity and expand the interfacing capabilities of ST evaluation boards with CN34 connectors. The STEVAL-C34ADPTK1 is suitable for developers and engineers aiming to integrate additional peripherals and modules into their evaluation setups. Additionally, the kit supports debugging through exposed spare pins

Figure 1. STEVAL-C34ADPTK1 evaluation kit



*Notice: For dedicated assistance, submit a request through our online support portal at **www.st.com/support**.*

1 Getting started

The STEVAL-C34ADPTK1 is a connectivity and expansion kit designed to help users prototype and evaluate additional peripherals with ST evaluation boards that feature the C34 connector. The kit includes the following components:

- STEVAL-C34ADPT2 adapter board
- STEVAL-FLTCB05 flex cable (15 cm)

These components allow users to break out and access all C34 signals, simplify wiring, and support debugging in a compact setup.

2 Check board compatibility

The kit is compatible with ST evaluation boards that feature the C34 connector, including:

- STEVAL-STWINBX1
- STEVAL-ASTRA1B
- STEVAL-PROTEUS1
- STEVAL-NBIOTV1

Verify that the target board has the C34 connector and that the corresponding documentation, such as the schematic and pinout, is available.

3 Make the physical connections

To begin, connect the STEVAL-FLTCB05 flex cable by inserting one end into the C34 connector of the ST evaluation board. Then, connect the other end to the STEVAL-C34ADPT2 adapter board. Align the orientation with the polarity markings to ensure proper mating of the connector.

After connecting the cable, position the adapter board so that all exposed pins and connectors are accessible during development and testing. The small form factor and pass-through capability of the board allow integration into compact setups or stacking with other hardware for complex configurations.

With the hardware mounted, use the exposed pins and connectors. The adapter board breaks out all C34 signals, providing flexibility to expand the system.

Use the exposed pin headers to connect additional peripherals such as sensors, actuators, or other expansion modules, as well as custom prototype circuits on a breadboard or an external printed circuit board. The exposed spare pins serve as convenient test points for connecting an oscilloscope or a logic analyzer. This setup allows monitoring of critical signals, verification of timing, and troubleshooting of interface issues within the evaluation setup.

4 Schematic diagrams

Figure 2. **STEVAL-C34ADPT2 circuit schematic**

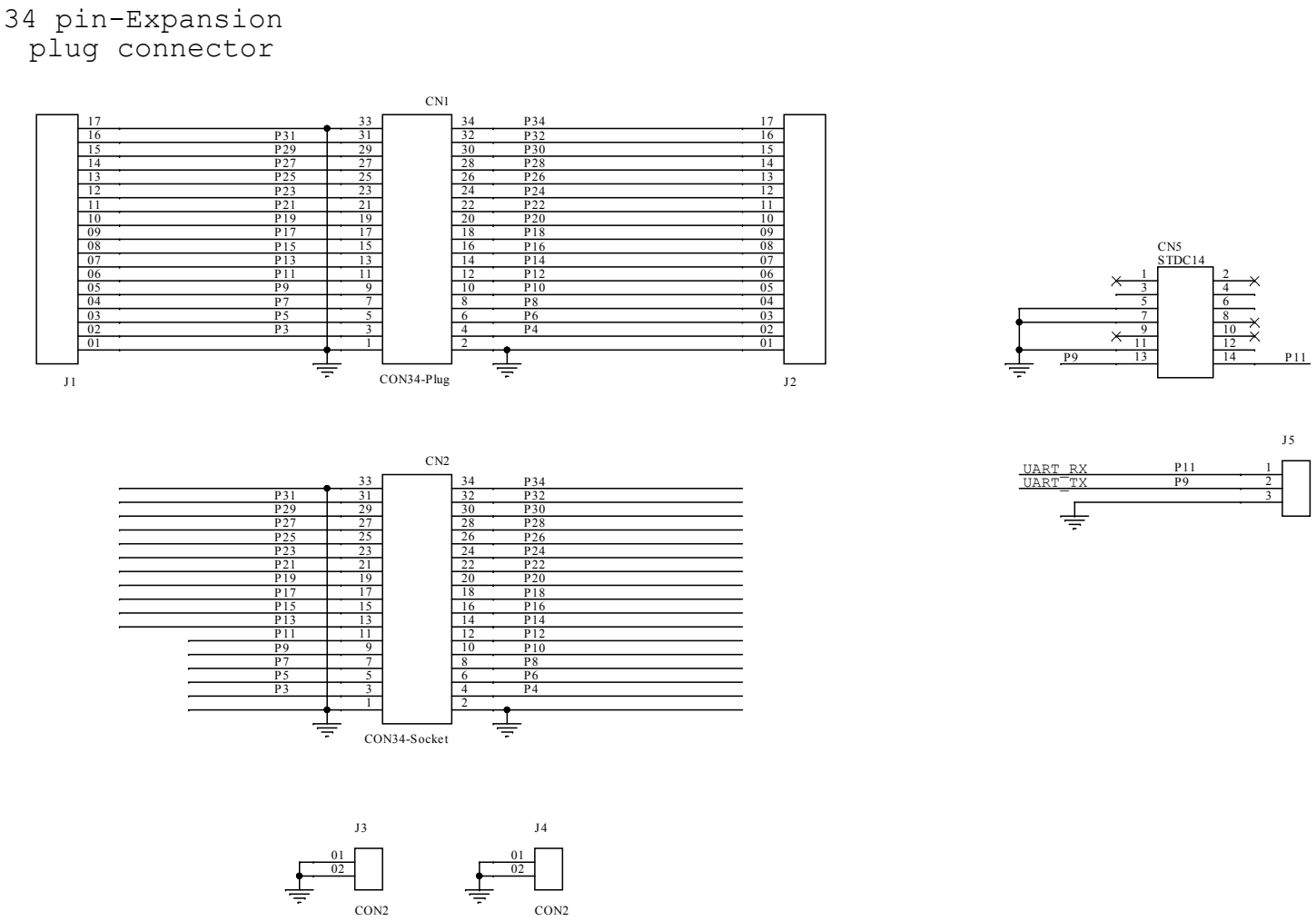
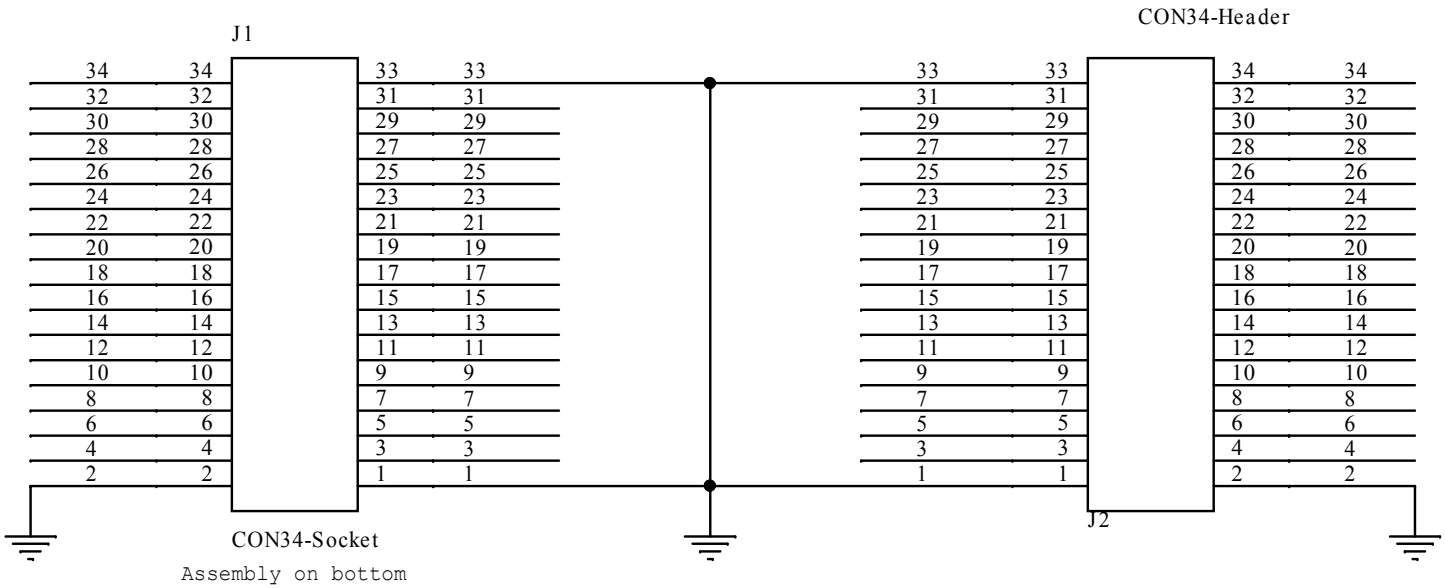


Figure 3. STEVAL-FLTCB05 circuit schematic



5 Bill of materials

Table 1. STEVAL-C34ADPTK1 bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
2	1	-	Table 2. STEVAL-C34ADPT2	C34 adapter board with spare pins and STDC14 connector	ST	Not available for separate sale
1	1	-	Table 3. STEVAL-FLTCB05	C34 Flex 15 cm	ST	Not available for separate sale

Table 2. STEVAL-C34ADPT2 bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	1	CN1	CON34-Plug	CONN SOCKET 34POS SMD GOLD	Panasonic Electric Works	AXF6G3412A
2	1	CN2	CON34-Socket	CONN SOCKET 34POS SMD GOLD	Panasonic Electric Works	AXF5G3412A
3	1	CN5	STDC14	STDC14 - ARM MIPI10 compatible	Samtec	FTSH-107-01-L-DV-K-P
4	2	J1,J2	CON17		Samtec	TSW-117-05-FM-S
5	2	J3,J4	CON2		Samtec	TSW-102-05-G-S
6	1	J5	CON3	2.54 TH Jumper	Samtec	TSW-103-07-G-S

Table 3. STEVAL-FLTCB05 bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	1	J1	AXF5G3412A	34Pin Connector - Socket	Panasonic Electric Works	AXF5G3412A
2	1	J2	AXF6G3412A	34Pin Connector - Plug	Panasonic Electric Works	AXF6G3412A

6 Kit versions

Table 4. **STEVAL-C34ADPTK1 versions**

PCB version	Schematic diagrams	Bill of materials
STV$C34ADPTK1A(1)	STV$C34ADPTK1A schematic diagrams	STV$C34ADPTK1A bill of materials

1. *This code identifies the STEVAL-C34ADPTK1 evaluation kit first version. The kit consists of a STEVAL-C34ADPT2 adapter board whose version is identified by the code STV$C34ADPT2A and a STEVAL-FLTCB05 flex cable whose version is identified by the code STV$FLTCB05A.*

7 Regulatory compliance information

Notice for US Federal Communication Commission (FCC)

For evaluation only; not FCC approved for resale

FCC NOTICE - This kit is designed to allow:

(1) Product developers to evaluate electronic components, circuitry, or software associated with the kit to determine

whether to incorporate such items in a finished product and

(2) Software developers to write software applications for use with the end product.

This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product not cause harmful interference to licensed radio stations and that this product accept harmful interference. Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of this chapter, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under part 5 of this chapter 3.1.2.

Notice for Innovation, Science and Economic Development Canada (ISED)

For evaluation purposes only. This kit generates, uses, and can radiate radio frequency energy and has not been tested for compliance with the limits of computing devices pursuant to Industry Canada (IC) rules.

À des fins d'évaluation uniquement. Ce kit génère, utilise et peut émettre de l'énergie radiofréquence et n'a pas été testé pour sa conformité aux limites des appareils informatiques conformément aux règles d'Industrie Canada (IC).

Notice for the European Union

This device is in conformity with the essential requirements of the Directive 2011/65/EU (RoHS II), including subsequent revisions and additions, as well as amended by the Delegated Directive 2015/863/EU (RoHS III).

Notice for the United Kingdom

This device is in conformity with the relevant provisions of the following EU legislation recognized by the United Kingdom:

• The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS) (S.I. 2012/3032) implementing Directive 2011/65/EU (RoHS II), including subsequent revisions and additions, as well as amended by the Delegated Directive 2015/863/EU (RoHS III).

Revision history

Table 5. **Document revision history**

Date	Revision	Changes
20-Apr-2026	1	Initial release.

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