

# Hardware Migration to CC2652R7 and CC2652P7



## ABSTRACT

This application report describes the required hardware changes when moving from a CC26xx device to the CC2652R7 and CC2652P7 SimpleLink™ wireless MCUs.

For information on moving from a CC13xx to the CC1352P7 device, please refer to the [Hardware Migration to CC1312R7 and CC1352P7](#) guide.

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## Trademarks

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## 1 Migrating from CC26x0 to CC2652R7

For the migration of CC26x0 devices to the CC2652R7 device, please see the [Hardware Migration From CC26x0 to CC26x2R](#) guide. The CC2652R7 is a memory upgrade of the CC26x2R device. The CC2652R7 device has 144 kB of RAM and 704 kB of flash. The two devices are pin to pin compatible and a PCB design made for the CC26x2R device can be reused for the CC2652R7 device. It should be noted that for applications requiring a slow clock accuracy of  $< +600$  PPM (such as Bluetooth Low Energy applications), an external 32-kHz slow clock is required for use with the CC2652R7 device. The only other update to the Build-of-Material (BOM) required is the Wireless MCU.

## 2 Migrating from CC26x2R to CC2652R7

The CC2652R7 is a memory upgrade of the CC26x2R device. The CC2652R7 device has 144 kB of RAM and 704 kB of flash. The two devices are pin to pin compatible and a PCB design made for the CC26x2R device can be reused for the CC2652R7 device. It should be noted that for applications requiring a slow clock accuracy of  $< \pm 600$  PPM (such as Bluetooth Low Energy applications), an external 32-kHz slow clock is required for use with the CC2652R7 device. The only other update to the Build-of-Material (BOM) required is the Wireless MCU.

## 3 Migrating from CC2652P to CC2652P7

The CC2652P7 is a memory upgrade of the CC2652P device. The CC2652P7 device has 144 kB of RAM and 704 kB of flash. The two devices are pin to pin compatible and a PCB design made for the CC2652P device can be reused for the CC2652P7 device. It should be noted that for applications requiring a slow clock accuracy of  $< \pm 600$  PPM (such as Bluetooth Low Energy applications), an external 32-kHz slow clock is required for use with the CC2652P7 device. The only other update to the Build-of-Material (BOM) required is the Wireless MCU.

## 4 Regulatory Compliance Considerations

Radio certification of the customer's application and end equipment is the customer's responsibility. The customer is solely responsible for the design, validation, and testing of its applications as well as for compliance with all legal and regulatory requirements concerning its applications. Industry best practices generally require that the customer conducts qualification tests on actual applications considering possible environmental and other conditions that the customer's application may encounter. TI recommends consulting with an accredited test house if in doubt on regulatory matters.

## 5 Summary

As summarized in this migration guide, there are minimal or no hardware changes required when migrating to the CC2652R7 and CC2652P7 devices. Please see [SmartRF™ Studio](#) for the latest characterization settings.

## 6 References

- [CC2652R7 Datasheet](#)
- [CC2652P7 Datasheet](#)
- [LP-CC2652R7 Launchpad Design Files](#)

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