

# Pin Equivalent Diagrams for the BQ76952, BQ76942, and BQ769142



## ABSTRACT

The BQ76952 family of products, which includes the BQ76952, BQ76942, and BQ769142, contain a variety of low voltage, medium voltage, and high voltage pins, many with specialized circuitry. Equivalent diagrams are included for select device pins.

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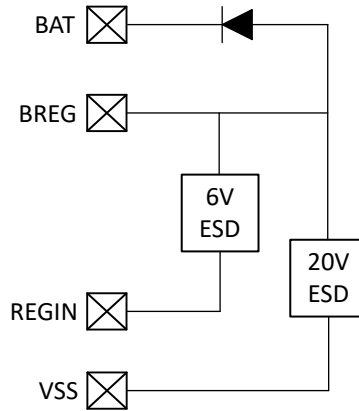
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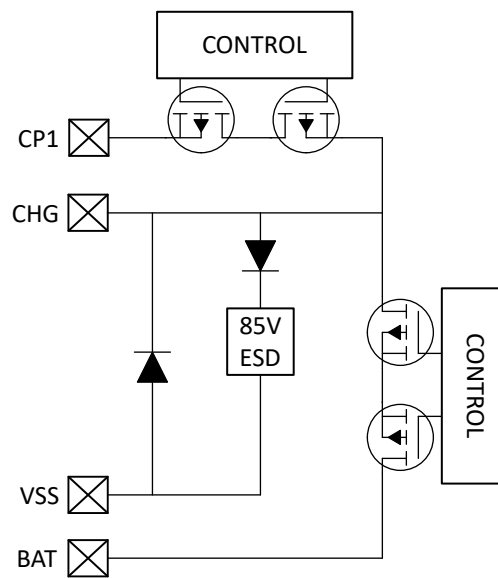
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## 1 Introduction

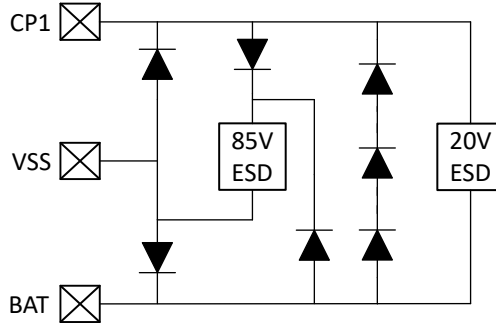
The pin equivalent diagrams for selected pins are shown below. These diagrams are only for informational purposes and do not include full details of all internal circuitry. Component parameter values shown in the diagrams are only estimates and may not match actual device functionality. The customer should rely upon the device data sheet and the specifications therein for decisions regarding the system design.



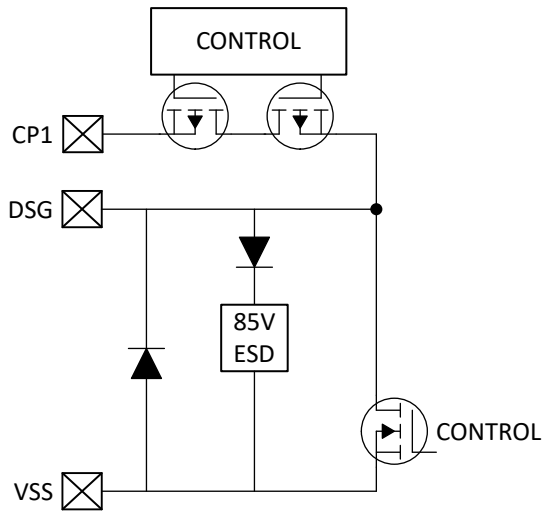
**Figure 1-1. BREG Pin Equivalent Diagram**



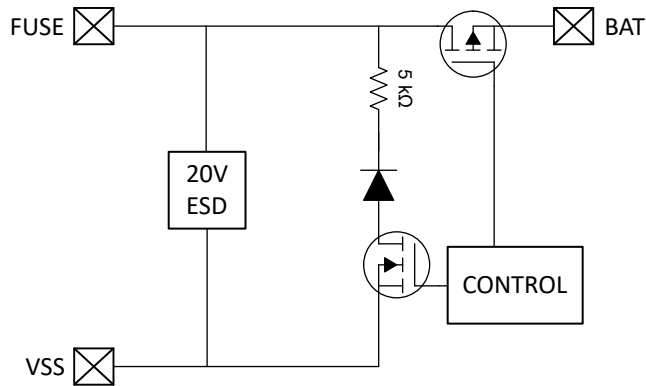
**Figure 1-2. CHG Pin Equivalent Diagram**



**Figure 1-3. BAT and CP1 Pin Equivalent Diagram**



**Figure 1-4. DSG Pin Equivalent Diagram**



**Figure 1-5. FUSE Pin Equivalent Diagram**

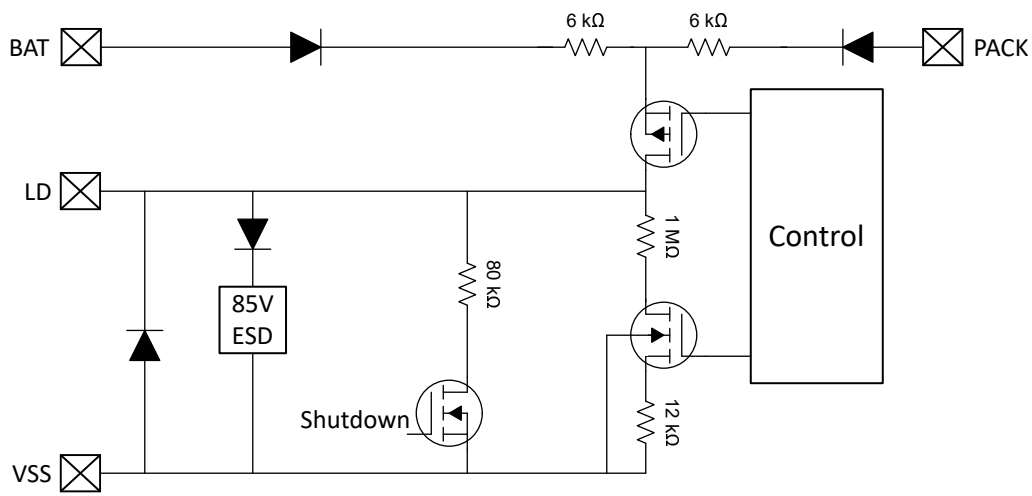


Figure 1-6. LD Pin Equivalent Diagram

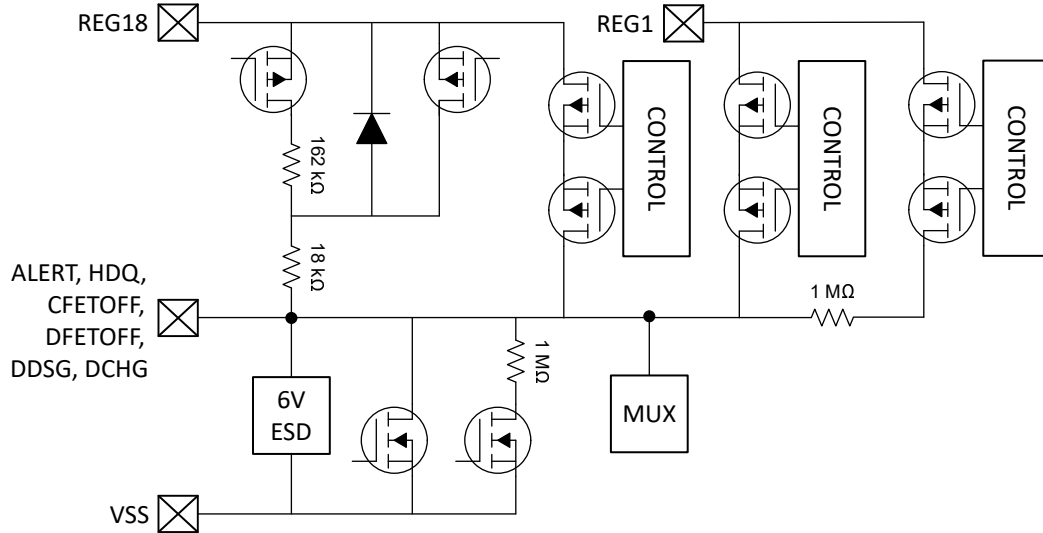


Figure 1-7. Pin Equivalent Diagram for the ALERT, HDQ, CFETOFF, DFETOFF, DCHG, and DDSG Pins

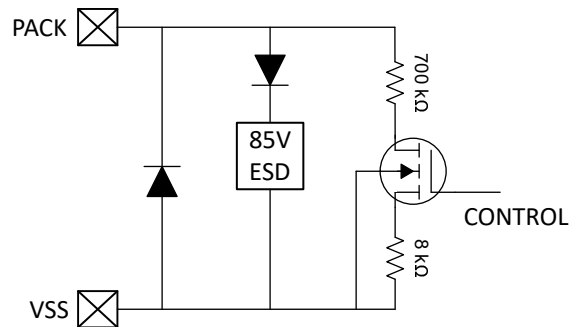
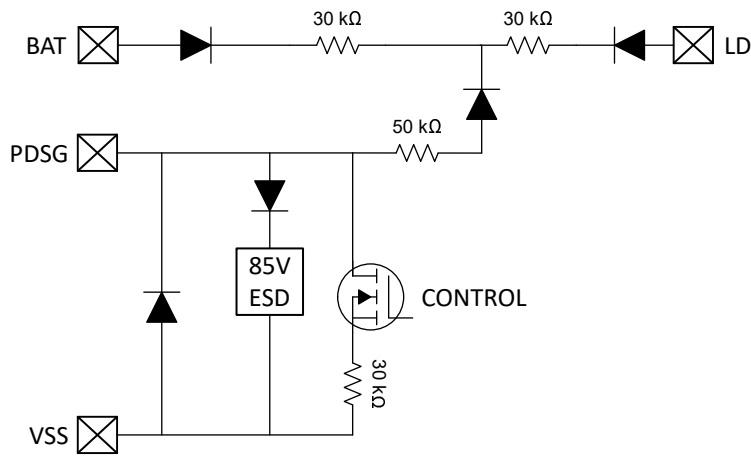
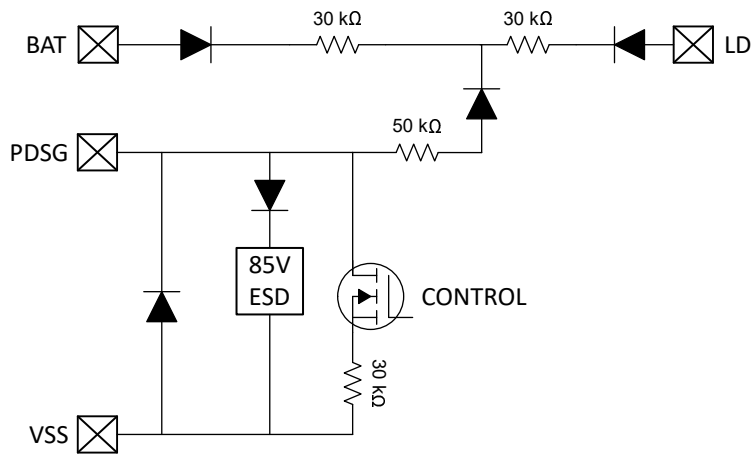


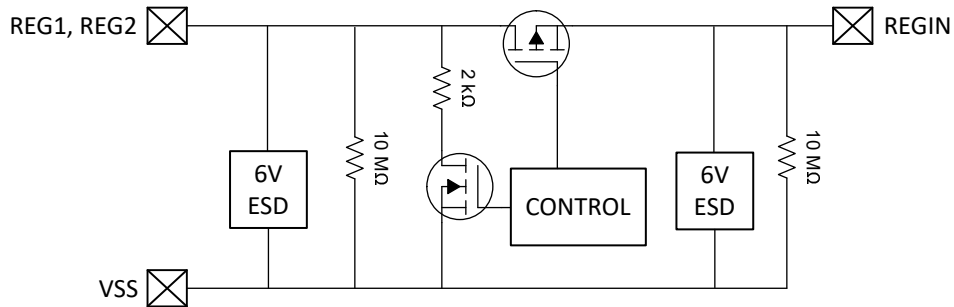
Figure 1-8. PACK Pin Equivalent Diagram



**Figure 1-9. PCHG Pin Equivalent Diagram**



**Figure 1-10. PDSG Pin Equivalent Diagram**



**Figure 1-11. REG1 and REG2 Pin Equivalent Diagrams**

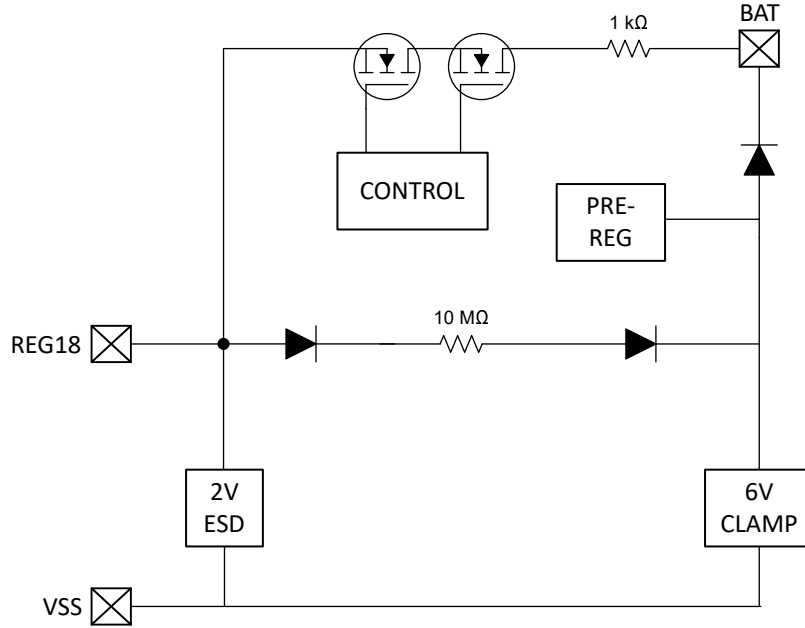


Figure 1-12. REG18 Pin Equivalent Diagram

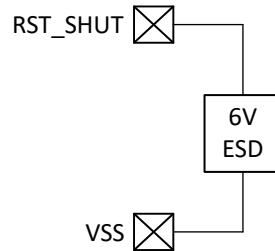


Figure 1-13. RST\_SHUT Pin Equivalent Diagram

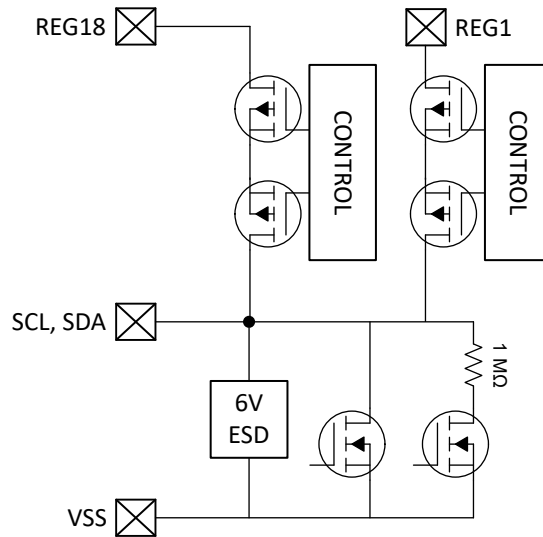
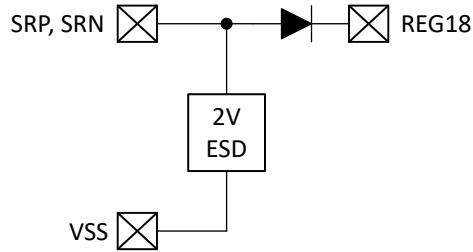
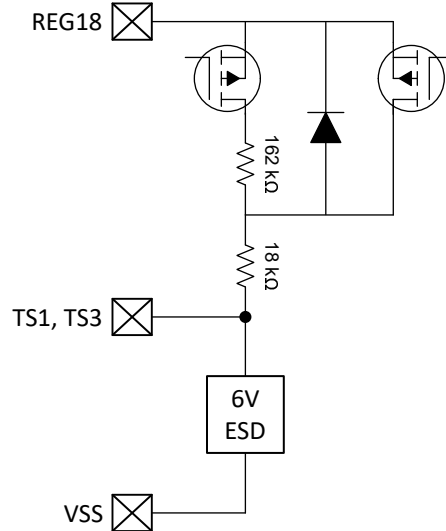


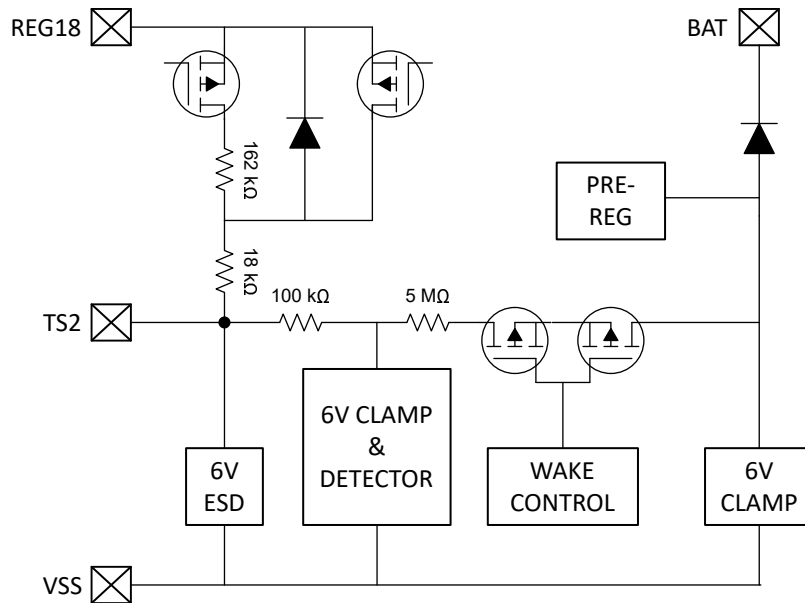
Figure 1-14. SDA and SCL Pin Equivalent Diagrams



**Figure 1-15. SRP and SRN Pin Equivalent Diagrams**



**Figure 1-16. TS1 and TS3 Pin Equivalent Diagrams**



**Figure 1-17. TS2 Pin Equivalent Diagram**

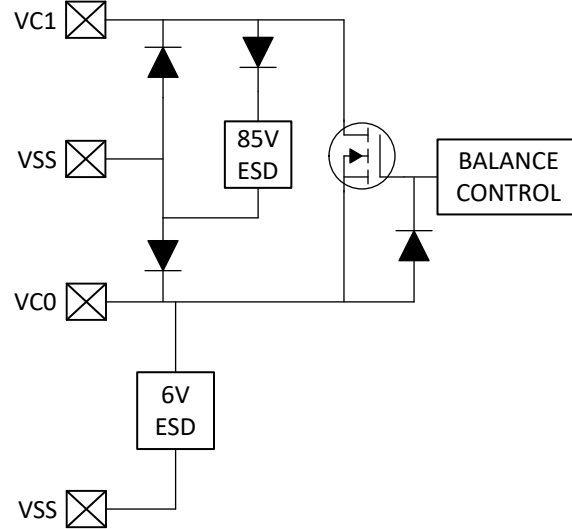


Figure 1-18. VC0 Pin Equivalent Diagram

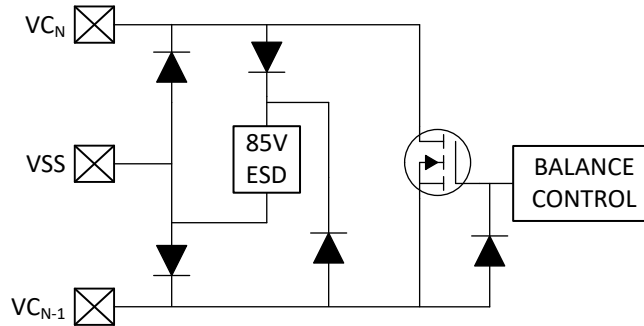


Figure 1-19. Pin Equivalent Diagram for the Cell Input Pins (except for VC0 and the top VC pin)

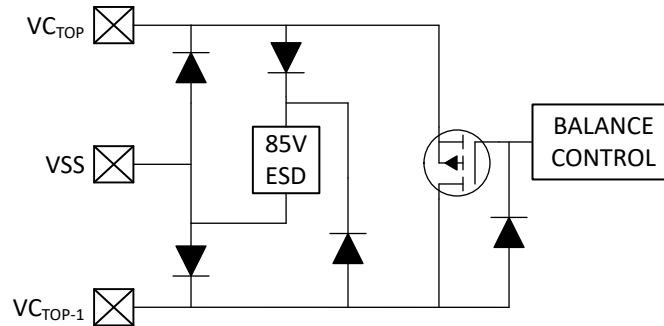


Figure 1-20. Pin Equivalent Diagram for the Top Cell Input Pin (VC16 for BQ76952, VC14 for BQ769142, VC10 for BQ76942)



## 2 References

For additional information, see the following related documents:

- [BQ76952 3S-16S Battery Monitor and Protector Data Sheet](#)
- [BQ76952 Technical Reference Manual](#)
- [BQ76952 Evaluation Module User's Guide](#)
- [BQ769142 3S-14S Battery Monitor and Protector Data Sheet](#)
- [BQ769142 Technical Reference Manual](#)
- [BQ76942 3S-10S Battery Monitor and Protector Data Sheet](#)
- [BQ76942 Technical Reference Manual](#)

## 3 Revision History

DATE	REVISION	NOTES
May 2021	*	Initial Release

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