An alternative proof of Quadrilateral Midpoint Theorem

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- 1. Complete parallelogram *DBCB*'.
- 2. Since its diagonals bisect each other, *BFB*' is a straight line.
- 3. From the midpoint theorem, *EF* is one half of *AB*'.

4.
$$EF = \frac{1}{2}AB' \le \frac{1}{2}AD + \frac{1}{2}DB' = \frac{1}{2}(AD + BC).$$

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