

[Chamberlain, R. M.](#)

Gray codes, fast Fourier transforms and hypercubes. (English) [Zbl 0635.65145](#)
[Parallel Comput.](#) 6, No. 2, 225-233 (1988).

The usefulness of the hypercube architecture is stressed for the implementation of the fast Fourier transform. It is so because the data communications at every step of computation are only needed between neighbouring processors. If the data are distributed according to a binary reflected Gray code, the computing time increases a little as an effect due to imbalance in the load between processors.

Reviewer: Y.Kobayashi

MSC:

[65T40](#) Numerical methods for trigonometric approximation and interpolation [Cited in 9 Documents](#)
[65F30](#) Other matrix algorithms (MSC2010)
[42A15](#) Trigonometric interpolation
[65Y05](#) Parallel numerical computation

Keywords:

[parallel processing](#); [hypercube architecture](#); [fast Fourier transform](#); [Gray code](#)

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