

# NAG Library Chapter Contents

## F07 – Linear Equations (LAPACK)

F07 Chapter Introduction

<b>Routine Name</b>	<b>Mark of Introduction</b>	<b>Purpose</b>
F07AAF	21	DGESV nagf_lapack_dgesv Computes the solution to a real system of linear equations
F07ABF	21	DGESVX nagf_lapack_dgesvx Uses the <i>LU</i> factorization to compute the solution, error-bound and condition estimate for a real system of linear equations
F07ACF	22	DSGESV nagf_lapack_dsgesv Mixed precision real system solver
F07ADF	15	DGETRF nagf_lapack_dgetrf <i>LU</i> factorization of real <i>m</i> by <i>n</i> matrix
F07AEF	15	DGETRS nagf_lapack_dgetrs Solution of real system of linear equations, multiple right-hand sides, matrix already factorized by F07ADF (DGETRF)
F07AFF	21	DGEEQU nagf_lapack_dgeequ Computes row and column scalings intended to equilibrate a general real matrix and reduce its condition number
F07AGF	15	DGECON nagf_lapack_dgecon Estimate condition number of real matrix, matrix already factorized by F07ADF (DGETRF)
F07AHF	15	DGERFS nagf_lapack_dgerfs Refined solution with error bounds of real system of linear equations, multiple right-hand sides
F07AJF	15	DGETRI nagf_lapack_dgetri Inverse of real matrix, matrix already factorized by F07ADF (DGETRF)
F07ANF	21	ZGESV nagf_lapack_zgesv Computes the solution to a complex system of linear equations
F07APF	21	ZGESVX nagf_lapack_zgesvx Uses the <i>LU</i> factorization to compute the solution, error-bound and condition estimate for a complex system of linear equations

F07AQF	22	ZCGESV nagf_lapack_zcgesv Mixed precision complex system solver
F07ARF	15	ZGETRF nagf_lapack_zgetrf <i>LU</i> factorization of complex <i>m</i> by <i>n</i> matrix
F07ASF	15	ZGETRS nagf_lapack_zgetrs Solution of complex system of linear equations, multiple right-hand sides, matrix already factorized by F07ARF (ZGETRF)
F07ATF	21	ZGEEQU nagf_lapack_zgeequ Computes row and column scalings intended to equilibrate a general complex matrix and reduce its condition number
F07AUF	15	ZGECON nagf_lapack_zgecon Estimate condition number of complex matrix, matrix already factorized by F07ARF (ZGETRF)
F07AVF	15	ZGERFS nagf_lapack_zgerfs Refined solution with error bounds of complex system of linear equations, multiple right-hand sides
F07AWF	15	ZGETRI nagf_lapack_zgetri Inverse of complex matrix, matrix already factorized by F07ARF (ZGETRF)
F07BAF	21	DGBSV nagf_lapack_dgbsv Computes the solution to a real banded system of linear equations
F07BBF	21	DGBSVX nagf_lapack_dgbsvx Uses the <i>LU</i> factorization to compute the solution, error-bound and condition estimate for a real banded system of linear equations
F07BDF	15	DGBTRF nagf_lapack_dgbtrf <i>LU</i> factorization of real <i>m</i> by <i>n</i> band matrix
F07BEF	15	DGBTRS nagf_lapack_dgbtrs Solution of real band system of linear equations, multiple right-hand sides, matrix already factorized by F07BDF (DGBTRF)
F07BFF	21	DGBEQU nagf_lapack_dgbequ Computes row and column scalings intended to equilibrate a real banded matrix and reduce its condition number
F07BGF	15	DGBCON nagf_lapack_dgbcon Estimate condition number of real band matrix, matrix already factorized by F07BDF (DGBTRF)
F07BHF	15	DGBRFS nagf_lapack_dgbrfs Refined solution with error bounds of real band system of linear equations, multiple right-hand sides

F07BNF	21	ZGBSV nagf_lapack_zgbsv Computes the solution to a complex banded system of linear equations
F07BPF	21	ZGBSVX nagf_lapack_zgbsvx Uses the $LU$ factorization to compute the solution, error-bound and condition estimate for a complex banded system of linear equations
F07BRF	15	ZGBTRF nagf_lapack_zgbtrf $LU$ factorization of complex $m$ by $n$ band matrix
F07BSF	15	ZGBTRS nagf_lapack_zgbtrs Solution of complex band system of linear equations, multiple right-hand sides, matrix already factorized by F07BRF (ZGBTRF)
F07BTF	21	ZGBEQU nagf_lapack_zgbequ Computes row and column scalings intended to equilibrate a complex banded matrix and reduce its condition number
F07BUF	15	ZGBCON nagf_lapack_zgbcon Estimate condition number of complex band matrix, matrix already factorized by F07BRF (ZGBTRF)
F07BVF	15	ZGBRFS nagf_lapack_zgbrfs Refined solution with error bounds of complex band system of linear equations, multiple right-hand sides
F07CAF	21	DGTSV nagf_lapack_dgtsv Computes the solution to a real tridiagonal system of linear equations
F07CBF	21	DGTSVX nagf_lapack_dgtsvx Uses the $LU$ factorization to compute the solution, error-bound and condition estimate for a real tridiagonal system of linear equations
F07CDF	21	DGTTRF nagf_lapack_dgttrf $LU$ factorization of real tridiagonal matrix
F07CEF	21	DGTTRS nagf_lapack_dgttrs Solves a real tridiagonal system of linear equations using the $LU$ factorization computed by F07CDF (DGTTRF)
F07CGF	21	DGTCON nagf_lapack_dgtcon Estimates the reciprocal of the condition number of a real tridiagonal matrix using the $LU$ factorization computed by F07CDF (DGTTRF)
F07CHF	21	DGTRFS nagf_lapack_dgtrfs Refined solution with error bounds of real tridiagonal system of linear equations, multiple right-hand sides
F07CNF	21	ZGTSV nagf_lapack_zgtsv Computes the solution to a complex tridiagonal system of linear equations

F07CPF	21	ZGTSVX nagf_lapack_zgtsvx Uses the $LU$ factorization to compute the solution, error-bound and condition estimate for a complex tridiagonal system of linear equations
F07CRF	21	ZGTTRF nagf_lapack_zgttrf $LU$ factorization of complex tridiagonal matrix
F07CSF	21	ZGTTRS nagf_lapack_zgttrs Solves a complex tridiagonal system of linear equations using the $LU$ factorization computed by F07CDF (DGTTTRF)
F07CUF	21	ZGTCON nagf_lapack_zgtcon Estimates the reciprocal of the condition number of a complex tridiagonal matrix using the $LU$ factorization computed by F07CDF (DGTTTRF)
F07CVF	21	ZGTRFS nagf_lapack_zgtrfs Refined solution with error bounds of complex tridiagonal system of linear equations, multiple right-hand sides
F07FAF	21	DPOSV nagf_lapack_dposv Computes the solution to a real symmetric positive definite system of linear equations
F07FBF	21	DPOSVX nagf_lapack_dposvx Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a real symmetric positive definite system of linear equations
F07FCF	23	DSPOSV nagf_lapack_dsposv Uses the Cholesky factorization to compute the solution for a real symmetric positive definite system of linear equations
F07FDF	15	DPOTRF nagf_lapack_dpotrf Cholesky factorization of real symmetric positive definite matrix
F07FEF	15	DPOTRS nagf_lapack_dpots Solution of real symmetric positive definite system of linear equations, multiple right-hand sides, matrix already factorized by F07FDF (DPOTRF)
F07FFF	21	DPOEQU nagf_lapack_dpoequ Computes row and column scalings intended to equilibrate a real symmetric positive definite matrix and reduce its condition number
F07FGF	15	DPOCON nagf_lapack_dpocon Estimate condition number of real symmetric positive definite matrix, matrix already factorized by F07FDF (DPOTRF)
F07FHF	15	DPORFS nagf_lapack_dporfs Refined solution with error bounds of real symmetric positive definite system of linear equations, multiple right-hand sides

F07FJF	15	DPOTRI nagf_lapack_dpotri Inverse of real symmetric positive definite matrix, matrix already factorized by F07FDF (DPOTRF)
F07FNF	21	ZPOSV nagf_lapack_zposv Computes the solution to a complex Hermitian positive definite system of linear equations
F07FPF	21	ZPOSVX nagf_lapack_zposvx Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a complex Hermitian positive definite system of linear equations
F07FQF	23	ZCPOSV nagf_lapack_zcposv Uses the Cholesky factorization to compute the solution for a complex Hermitian positive definite system of linear equations
F07FRF	15	ZPOTRF nagf_lapack_zpotrf Cholesky factorization of complex Hermitian positive definite matrix
F07FSF	15	ZPOTRS nagf_lapack_zpotrs Solution of complex Hermitian positive definite system of linear equations, multiple right-hand sides, matrix already factorized by F07FRF (ZPOTRF)
F07FTF	21	ZPOEQU nagf_lapack_zpoequ Computes row and column scalings intended to equilibrate a complex Hermitian positive definite matrix and reduce its condition number
F07FUF	15	ZPOCON nagf_lapack_zpocon Estimate condition number of complex Hermitian positive definite matrix, matrix already factorized by F07FRF (ZPOTRF)
F07FVF	15	ZPORFS nagf_lapack_zporfs Refined solution with error bounds of complex Hermitian positive definite system of linear equations, multiple right-hand sides
F07FWF	15	ZPOTRI nagf_lapack_zpotri Inverse of complex Hermitian positive definite matrix, matrix already factorized by F07FRF (ZPOTRF)
F07GAF	21	DPPSV nagf_lapack_dpssv Computes the solution to a real symmetric positive definite system of linear equations, packed storage
F07GBF	21	DPPSVX nagf_lapack_dpssvx Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a real symmetric positive definite system of linear equations, packed storage
F07GDF	15	DPPTRF nagf_lapack_dpptrf Cholesky factorization of real symmetric positive definite matrix, packed storage

F07GEF	15	<p>DPPTRS  nagf_lapack_dpptrs  Solution of real symmetric positive definite system of linear equations, multiple right-hand sides, matrix already factorized by F07GDF (DPPTRF), packed storage</p>
F07GFF	21	<p>DPPEQU  nagf_lapack_dppequ  Computes row and column scalings intended to equilibrate a real symmetric positive definite matrix and reduce its condition number, packed storage</p>
F07GGF	15	<p>DPPCON  nagf_lapack_dppcon  Estimate condition number of real symmetric positive definite matrix, matrix already factorized by F07GDF (DPPTRF), packed storage</p>
F07GHF	15	<p>DPPRFS  nagf_lapack_dpprfs  Refined solution with error bounds of real symmetric positive definite system of linear equations, multiple right-hand sides, packed storage</p>
F07GJF	15	<p>DPPTRI  nagf_lapack_dpptri  Inverse of real symmetric positive definite matrix, matrix already factorized by F07GDF (DPPTRF), packed storage</p>
F07GNF	21	<p>ZPPSV  nagf_lapack_zppsv  Computes the solution to a complex Hermitian positive definite system of linear equations, packed storage</p>
F07GPF	21	<p>ZPPSVX  nagf_lapack_zppsvx  Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a complex Hermitian positive definite system of linear equations, packed storage</p>
F07GRF	15	<p>ZPPTRF  nagf_lapack_zpptrf  Cholesky factorization of complex Hermitian positive definite matrix, packed storage</p>
F07GSF	15	<p>ZPPTRS  nagf_lapack_zpptrs  Solution of complex Hermitian positive definite system of linear equations, multiple right-hand sides, matrix already factorized by F07GRF (ZPPTRF), packed storage</p>
F07GTF	21	<p>ZPPEQU  nagf_lapack_zppequ  Computes row and column scalings intended to equilibrate a complex Hermitian positive definite matrix and reduce its condition number, packed storage</p>
F07GUF	15	<p>ZPPCON  nagf_lapack_zppcon  Estimate condition number of complex Hermitian positive definite matrix, matrix already factorized by F07GRF (ZPPTRF), packed storage</p>
F07GVF	15	<p>ZPPRFS  nagf_lapack_zpprfs  Refined solution with error bounds of complex Hermitian positive definite system of linear equations, multiple right-hand sides, packed storage</p>

F07GWF	15	ZPPTRI nagf_lapack_zpptri Inverse of complex Hermitian positive definite matrix, matrix already factorized by F07GRF (ZPPTRF), packed storage
F07HAF	21	DPBSV nagf_lapack_dpbsv Computes the solution to a real symmetric positive definite banded system of linear equations
F07HBF	21	DPBSVX nagf_lapack_dpbsvx Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a real symmetric positive definite banded system of linear equations
F07HDF	15	DPBTRF nagf_lapack_dpbtrf Cholesky factorization of real symmetric positive definite band matrix
F07HEF	15	DPBTRS nagf_lapack_dpbtrs Solution of real symmetric positive definite band system of linear equations, multiple right-hand sides, matrix already factorized by F07HDF (DPBTRF)
F07HFF	21	DPBEQU nagf_lapack_dpbequ Computes row and column scalings intended to equilibrate a real symmetric positive definite banded matrix and reduce its condition number
F07HGF	15	DPBCON nagf_lapack_dpbcon Estimate condition number of real symmetric positive definite band matrix, matrix already factorized by F07HDF (DPBTRF)
F07HHF	15	DPBRFS nagf_lapack_dpbrfs Refined solution with error bounds of real symmetric positive definite band system of linear equations, multiple right-hand sides
F07HNF	21	ZPBSV nagf_lapack_zpbsv Computes the solution to a complex Hermitian positive definite banded system of linear equations
F07HPF	21	ZPBSVX nagf_lapack_zpbsvx Uses the Cholesky factorization to compute the solution, error-bound and condition estimate for a complex Hermitian positive definite banded system of linear equations
F07HRF	15	ZPBTRF nagf_lapack_zpbtrf Cholesky factorization of complex Hermitian positive definite band matrix
F07HSF	15	ZPBTRS nagf_lapack_zpbtrs Solution of complex Hermitian positive definite band system of linear equations, multiple right-hand sides, matrix already factorized by F07HRF (ZPBTRF)
F07HTF	21	ZPBEQU nagf_lapack_zpbequ Computes row and column scalings intended to equilibrate a complex Hermitian positive definite banded matrix and reduce its condition number

F07HUF	15	ZPBCON nagf_lapack_zpbcon Estimate condition number of complex Hermitian positive definite band matrix, matrix already factorized by F07HRF (ZPBTRF)
F07HVF	15	ZPBRFS nagf_lapack_zpbrfs Refined solution with error bounds of complex Hermitian positive definite band system of linear equations, multiple right-hand sides
F07JAF	21	DPTSV nagf_lapack_dptsv Computes the solution to a real symmetric positive definite tridiagonal system of linear equations
F07JBF	21	DPTSVX nagf_lapack_dptsvx Uses the modified Cholesky factorization to compute the solution, error-bound and condition estimate for a real symmetric positive definite tridiagonal system of linear equations
F07JDF	21	DPTTRF nagf_lapack_dpstrf Computes the modified Cholesky factorization of a real symmetric positive definite tridiagonal matrix
F07JEF	21	DPTTRS nagf_lapack_dpstrs Solves a real symmetric positive definite tridiagonal system using the modified Cholesky factorization computed by F07JDF (DPTTRF)
F07JGF	21	DPTCON nagf_lapack_dptcon Computes the reciprocal of the condition number of a real symmetric positive definite tridiagonal system using the modified Cholesky factorization computed by F07JDF (DPTTRF)
F07JHF	21	DPTRFS nagf_lapack_dptrfs Refined solution with error bounds of real symmetric positive definite tridiagonal system of linear equations, multiple right-hand sides
F07JNF	21	ZPTSV nagf_lapack_zptsv Computes the solution to a complex Hermitian positive definite tridiagonal system of linear equations
F07JPF	21	ZPTSVX nagf_lapack_zptsvx Uses the modified Cholesky factorization to compute the solution, error-bound and condition estimate for a complex Hermitian positive definite tridiagonal system of linear equations
F07JRF	21	ZPTTRF nagf_lapack_zpttrf Computes the modified Cholesky factorization of a complex Hermitian positive definite tridiagonal matrix
F07JSF	21	ZPTTRS nagf_lapack_zpttrs Solves a complex Hermitian positive definite tridiagonal system using the modified Cholesky factorization computed by F07JRF (ZPTTRF)



F07JUF	21	ZPTCON nagf_lapack_zptcon Computes the reciprocal of the condition number of a complex Hermitian positive definite tridiagonal system using the modified Cholesky factorization computed by F07JRF (ZPTTRF)
F07JVF	21	ZPTRFS nagf_lapack_zptrfs Refined solution with error bounds of complex Hermitian positive definite tridiagonal system of linear equations, multiple right-hand sides
F07KDF	23	DPSTRF nagf_lapack_dpstrf Cholesky factorization of real symmetric positive semidefinite matrix
F07KRF	23	ZPSTRF nagf_lapack_zpstrf Cholesky factorization of complex Hermitian positive semidefinite matrix
F07MAF	21	DSYSV nagf_lapack_dsysv Computes the solution to a real symmetric system of linear equations
F07MBF	21	DSYSVX nagf_lapack_dsysvx Uses the diagonal pivoting factorization to compute the solution to a real symmetric system of linear equations
F07MDF	15	DSYTRF nagf_lapack_dsytrf Bunch–Kaufman factorization of real symmetric indefinite matrix
F07MEF	15	DSYTRS nagf_lapack_dsytrs Solution of real symmetric indefinite system of linear equations, multiple right-hand sides, matrix already factorized by F07MDF (DSYTRF)
F07MGF	15	DSYCON nagf_lapack_dsycon Estimate condition number of real symmetric indefinite matrix, matrix already factorized by F07MDF (DSYTRF)
F07MHF	15	DSYRFS nagf_lapack_dsyarfs Refined solution with error bounds of real symmetric indefinite system of linear equations, multiple right-hand sides
F07MJF	15	DSYTRI nagf_lapack_dsytri Inverse of real symmetric indefinite matrix, matrix already factorized by F07MDF (DSYTRF)
F07MNF	21	ZHESV nagf_lapack_zhesv Computes the solution to a complex Hermitian system of linear equations
F07MPF	21	ZHESVX nagf_lapack_zhesvx Uses the diagonal pivoting factorization to compute the solution to a complex Hermitian system of linear equations
F07MRF	15	ZHETRF nagf_lapack_zhetrf Bunch–Kaufman factorization of complex Hermitian indefinite matrix

F07MSF	15	ZHETRS nagf_lapack_zhetrs Solution of complex Hermitian indefinite system of linear equations, multiple right-hand sides, matrix already factorized by F07MRF (ZHETRF)
F07MUF	15	ZHECON nagf_lapack_zhecon Estimate condition number of complex Hermitian indefinite matrix, matrix already factorized by F07MRF (ZHETRF)
F07MVF	15	ZHERFS nagf_lapack_zherfs Refined solution with error bounds of complex Hermitian indefinite system of linear equations, multiple right-hand sides
F07MWF	15	ZHETRI nagf_lapack_zhetri Inverse of complex Hermitian indefinite matrix, matrix already factorized by F07MRF (ZHETRF)
F07NNF	21	ZSYSV nagf_lapack_zsysv Computes the solution to a complex symmetric system of linear equations
F07NPF	21	ZSYSVX nagf_lapack_zsysvx Uses the diagonal pivoting factorization to compute the solution to a complex symmetric system of linear equations
F07NRF	15	ZSYTRF nagf_lapack_zsytrf Bunch–Kaufman factorization of complex symmetric matrix
F07NSF	15	ZSYTRS nagf_lapack_zsytrs Solution of complex symmetric system of linear equations, multiple right-hand sides, matrix already factorized by F07NRF (ZSYTRF)
F07NUF	15	ZSYCON nagf_lapack_zsycon Estimate condition number of complex symmetric matrix, matrix already factorized by F07NRF (ZSYTRF)
F07NVF	15	ZSYRFS nagf_lapack_zsyarfs Refined solution with error bounds of complex symmetric system of linear equations, multiple right-hand sides
F07NWF	15	ZSYTRI nagf_lapack_zsytri Inverse of complex symmetric matrix, matrix already factorized by F07NRF (ZSYTRF)
F07PAF	21	DSPSV nagf_lapack_dspsv Computes the solution to a real symmetric system of linear equations, packed storage
F07PBF	21	DSPSVX nagf_lapack_dspsvx Uses the diagonal pivoting factorization to compute the solution to a real symmetric system of linear equations, packed storage

F07PDF	15	DSPTRF nagf_lapack_dsptrf Bunch–Kaufman factorization of real symmetric indefinite matrix, packed storage
F07PEF	15	DSPTRS nagf_lapack_dsptrs Solution of real symmetric indefinite system of linear equations, multiple right-hand sides, matrix already factorized by F07PDF (DSPTRF), packed storage
F07PGF	15	DSPCON nagf_lapack_dspcon Estimate condition number of real symmetric indefinite matrix, matrix already factorized by F07PDF (DSPTRF), packed storage
F07PHF	15	DSPRFS nagf_lapack_dsprfs Refined solution with error bounds of real symmetric indefinite system of linear equations, multiple right-hand sides, packed storage
F07PJF	15	DSPTRI nagf_lapack_dsptri Inverse of real symmetric indefinite matrix, matrix already factorized by F07PDF (DSPTRF), packed storage
F07PNF	21	ZHPSV nagf_lapack_zhpsv Computes the solution to a complex Hermitian system of linear equations, packed storage
F07PPF	21	ZHPSVX nagf_lapack_zhpsvx Uses the diagonal pivoting factorization to compute the solution to a complex Hermitian system of linear equations, packed storage
F07PRF	15	ZHPTRF nagf_lapack_zhptraf Bunch–Kaufman factorization of complex Hermitian indefinite matrix, packed storage
F07PSF	15	ZHPTRS nagf_lapack_zhptra Solution of complex Hermitian indefinite system of linear equations, multiple right-hand sides, matrix already factorized by F07PRF (ZHPTRF), packed storage
F07PUF	15	ZHPCON nagf_lapack_zhpcon Estimate condition number of complex Hermitian indefinite matrix, matrix already factorized by F07PRF (ZHPTRF), packed storage
F07PVF	15	ZHPRFS nagf_lapack_zhptrafs Refined solution with error bounds of complex Hermitian indefinite system of linear equations, multiple right-hand sides, packed storage
F07PWF	15	ZHPTRI nagf_lapack_zhptra Inverse of complex Hermitian indefinite matrix, matrix already factorized by F07PRF (ZHPTRF), packed storage

F07QNF	21	ZSPSV nagf_lapack_zspsv Computes the solution to a complex symmetric system of linear equations, packed storage
F07QPF	21	ZSPSVX nagf_lapack_zspsvx Uses the diagonal pivoting factorization to compute the solution to a complex symmetric system of linear equations, packed storage
F07QRF	15	ZSPTRF nagf_lapack_zsptrf Bunch–Kaufman factorization of complex symmetric matrix, packed storage
F07QSF	15	ZSPTRS nagf_lapack_zsptrs Solution of complex symmetric system of linear equations, multiple right-hand sides, matrix already factorized by F07QRF (ZSPTRF), packed storage
F07QUF	15	ZSPCON nagf_lapack_zspcon Estimate condition number of complex symmetric matrix, matrix already factorized by F07QRF (ZSPTRF), packed storage
F07QVF	15	ZSPRFS nagf_lapack_zsprfs Refined solution with error bounds of complex symmetric system of linear equations, multiple right-hand sides, packed storage
F07QWF	15	ZSPTRI nagf_lapack_zsptri Inverse of complex symmetric matrix, matrix already factorized by F07QRF (ZSPTRF), packed storage
F07TEF	15	DTRTRS nagf_lapack_dtrtrs Solution of real triangular system of linear equations, multiple right-hand sides
F07TGF	15	DTRCON nagf_lapack_dtrcon Estimate condition number of real triangular matrix
F07THF	15	DTRRFS nagf_lapack_dtrrfs Error bounds for solution of real triangular system of linear equations, multiple right-hand sides
F07TJF	15	DTRTRI nagf_lapack_dtrtri Inverse of real triangular matrix
F07TSF	15	ZTRTRS nagf_lapack_ztrtrs Solution of complex triangular system of linear equations, multiple right-hand sides
F07TUF	15	ZTRCON nagf_lapack_ztrcon Estimate condition number of complex triangular matrix
F07TVF	15	ZTRRFS nagf_lapack_ztrrfs Error bounds for solution of complex triangular system of linear equations, multiple right-hand sides

F07TWF	15	ZTRTRI nagf_lapack_ztrtri Inverse of complex triangular matrix
F07UEF	15	DTPTRS nagf_lapack_dtptrs Solution of real triangular system of linear equations, multiple right-hand sides, packed storage
F07UGF	15	DTPCON nagf_lapack_dtpcon Estimate condition number of real triangular matrix, packed storage
F07UHF	15	DTPRFS nagf_lapack_dtparfs Error bounds for solution of real triangular system of linear equations, multiple right-hand sides, packed storage
F07UJF	15	DTPTRI nagf_lapack_dtptri Inverse of real triangular matrix, packed storage
F07USF	15	ZTPTRS nagf_lapack_ztptrs Solution of complex triangular system of linear equations, multiple right-hand sides, packed storage
F07UUF	15	ZTPCON nagf_lapack_ztpcon Estimate condition number of complex triangular matrix, packed storage
F07UVF	15	ZTPRFS nagf_lapack_ztparfs Error bounds for solution of complex triangular system of linear equations, multiple right-hand sides, packed storage
F07UWF	15	ZTPTRI nagf_lapack_ztptri Inverse of complex triangular matrix, packed storage
F07VEF	15	DTBTRS nagf_lapack_dtbtrs Solution of real band triangular system of linear equations, multiple right-hand sides
F07VGF	15	DTBCON nagf_lapack_dtbcon Estimate condition number of real band triangular matrix
F07VHF	15	DTBRFS nagf_lapack_dtbarfs Error bounds for solution of real band triangular system of linear equations, multiple right-hand sides
F07VSF	15	ZTBTRS nagf_lapack_ztbtrs Solution of complex band triangular system of linear equations, multiple right-hand sides
F07VUF	15	ZTBCON nagf_lapack_ztbcon Estimate condition number of complex band triangular matrix

F07VVF	15	ZTBRFS nagf_lapack_ztbrfs Error bounds for solution of complex band triangular system of linear equations, multiple right-hand sides
F07WDF	23	DPFTRF nagf_lapack_dpftf Cholesky factorization of real symmetric positive definite matrix, Rectangular Full Packed format
F07WEF	23	DPFTRS nagf_lapack_dpftfs Solution of real symmetric positive definite system of linear equations, multiple right-hand sides, coefficient matrix already factorized by F07WDF (DPFTRF), Rectangular Full Packed format
F07WJF	23	DPFTRI nagf_lapack_dpftri Inverse of real symmetric positive definite matrix, matrix already factorized by F07WDF (DPFTRF), Rectangular Full Packed format
F07WKF	23	DTFTRI nagf_lapack_dtftri Inverse of real triangular matrix, Rectangular Full Packed format, expert driver
F07WRF	23	ZPFTRF nagf_lapack_zpftf Cholesky factorization of complex Hermitian positive definite matrix, Rectangular Full Packed format
F07WSF	23	ZPFTRS nagf_lapack_zpftfs Solution of complex Hermitian positive definite system of linear equations, multiple right-hand sides, coefficient matrix already factorized by F07WRF (ZPFTRF), Rectangular Full Packed format
F07WWF	23	ZPFTRI nagf_lapack_zpftri Inverse of complex Hermitian positive definite matrix, matrix already factorized by F07WRF (ZPFTRF), Rectangular Full Packed format
F07WXF	23	ZTFTRI nagf_lapack_ztftri Inverse of complex triangular matrix, Rectangular Full Packed format