

APPENDIX C

List of Optimized Routines Which have Equivalent C Functions Included within Test Functions

The following table lists the optimized routines which have a corresponding C language equivalent routine provided in this release. The C source code for the corresponding routine can be found in the attached release. These routines can be compiled with any ANSI C standard compiler. Note that the routines which rely on trigonometric functions must have the corresponding C compiler math library available at compile time. The C version of the Wideband Optimized routines are not coded to approximate the trigonometric functions. Rather, they call the respective functions from the C compiler math library.

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TACORT.C	yes
TACOS.C	no
TACOSH.C	no
TALAWC.C	no
TALAWE.C	no
TALPHA.C	no
TASIN.C	no
TASINH.C	no
TASPEC.C	no
TATAN.C	no
TATAN2.C	no
TATANH.C	no
TBIQUAD.C	no
TBLKMAN.C	yes
TBLKMANH.C	yes
TBRTLETT.C	yes
TCACORT.C	yes
TCCCORT.C	yes
TCCDOTPR.C	yes
TCCMMUL.C	yes
TCCMSMUL.C	yes
TCCORT.C	yes
TCDESAMP.C	yes

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TCDOTPR.C	no
TCEIL.C	no
TCFFT.C	no
TCFFT16.C	no
TCFFT2D.C	no
TCFFT8.C	no
TCFFTD.C	no
TCFFTL.C	no
TCFFTU.C	no
TCFIR.C	yes
TCHKSUM.C	no
TCMADD.C	yes
TCMMDPD.C	yes
TCMMDPP.C	yes
TCMMOV.C	no
TCMMPDD.C	yes
TCMMPDP.C	yes
TCMMUL.C	yes
TCMSMUL.C	yes
TCMSUB.C	yes
TCMTRANS.C	yes
TCVMUL.C	yes
TCNV3X3P.C	yes
TCNV5X5P.C	yes

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TCOHER.C	no
TCOMB.C	no
TCONV.C	no
TCONV2D.C	yes
TCONV3X3.C	yes
TCONV5X5.C	yes
TCONV7X7.C	yes
TCOORD2D.C	yes
TCOORD3D.C	yes
TCORR.C	no
TCORR2D.C	yes
TCOS.C	no
TCOSH.C	no
TCSPEC.C	no
TCVABS.C	no
TCVADD.C	no
TCVADDPD.C	yes
TCVADDPP.C	yes
TCVCMA.C	no
TCVCMLX.C	no
TCVCMPLX.C	no
TCVCMPI.C	no
TCVCMUL.C	yes
TCVCONJ.C	yes

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TCVDIV.C	no
TCVEXP.C	no
TCVEXPM.C	no
TCVFILL.C	no
TCVMA.C	no
TCVMAGS.C	no
TCVMAGSA.C	no
TCVMMUL.C	yes
TCVMOV.C	no
TCVMOVDP.C	no
TCVMOVDPD.C	no
TCVMUL.C	yes
TCVNEG.C	no
TCVPHASE.C	no
TCVRADD.C	no
TCVRDIV.C	no
TCVRECP.C	no
TCVRMDPD.C	yes
TCVRMDPP.C	yes
TCVRMPDD.C	yes
TCVRMPDP.C	yes
TCVRMUL.C	no
TCVRSUB.C	no
TCVSADD.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TCVSDIV.C	no
TCVSMA.C	no
TCVSMUL.C	no
TCVSQRT.C	no
TCVSSUB.C	no
TCVSUB.C	no
TDATAVG.C	no
TDCT8X8.C	yes
TDESAMP.C	yes
TDESAMPD.C	no
TDOPPLER.C	yes
TDOTPR.C	no
TDOTPRDP.C	yes
TENDIAN.C	yes
TEXAMPLE.C	n/a
TEXP.C	no
TEXP10.C	no
TFABS.C	no
TFACT.C	no
TFFACT.C	no
TFFTWTS.C	yes
TFIR.C	no
TFIR5.C	no
TFIRDEC.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TFIRDECU.C	no
TFIRLMS.C	no
TFLOOR.C	no
TFMOD.C	no
TFREXP.C	no
THAMM.C	yes
THANN.C	yes
TINL.C	yes
TIQUNPK.C	no
TKAISER.C	no
TLDEXP.C	no
TLININT.C	yes
TLINMAG.C	yes
TLOG.C	no
TLOG10.C	no
TLOGMAG.C	yes
TLSQREG.C	no
TMADD.C	yes
TMAXM.C	no
TMAXMC.C	no
TMAXMGV.C	no
TMAXMGVI.C	no
TMAXV.C	no
TMAXVI.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TMCHOL.C	yes
TMCONST.C	no
TMCPIVOT.C	no
TMDETERM.C	no
TMDETRM2.C	no
TMDETRM3.C	no
TMEANDEV.C	no
TMEMTEST.C	no
TMEXTR.C	no
TMFBSUB.C	no
TMIDENT.C	no
TMINM.C	no
TMINMC.C	no
TMINMGV.C	no
TMINMGVI.C	no
TMINSRT.C	no
TMINV.C	no
TMINVI.C	no
TMINVRT.C	no
TMKRON.C	yes
TMLU.C	no
TMMAX.C	no
TMMIN.C	no
TMMOV.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TMMOVDP.C	no
TMMOVPD.C	no
TMMUL.C	yes
TMMULDPD.C	yes
TMMULDPP.C	yes
TMMULPDD.C	yes
TMMULPDP.C	yes
TMNULL.C	no
TMODF.C	no
TMORTH.C	no
TMOVAVG.C	yes
TMPPIVOT.C	no
TMPULSE.C	yes
TMPULSEP.C	yes
TMSKEW.C	no
TMSMUL.C	yes
TMSQE.C	no
TMSUB.C	yes
TMSYM.C	no
TMTRACE.C	yes
TMTRANS.C	yes
TMULAWC.C	no
TMULawe.C	no
TMUNITY.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TMVE.C	no
TMVEMG.C	yes
TMVESQ.C	no
TMVESSQ.C	no
TMVMUL.C	yes
TPERM.C	no
TPOLAR.C	no
TPOW.C	no
TRANGEV.C	no
TRECT.C	yes
TRFFT.C	no
TRFFT16.C	no
TRFFT32.C	no
TRFFT8.C	no
TRFFTL.C	no
TRFFTIP.C	no
TRFFTS.C	no
TRFFTU.C	no
TRMVESQ.C	no
TRSQRT.C	no
TSEE.C	no
TSIN.C	no
TSINC.C	yes
TSINH.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TSLIDWIN.C	no
TSND.C	no
TSQRT.C	no
TSTD.C	no
TSVE.C	no
TSVEMG.C	no
TSVESQ.C	no
TSVESSQ.C	no
TTAN.C	no
TTANH.C	no
TV2FLOAT.C	no
TVAAM.C	no
TVABS.C	no
TVACOS.C	no
TVACOSH.C	no
TVACOT.C	no
TVACOTH.C	no
TVACSC.C	no
TVACSCH.C	no
TVADD.C	no
TVAM.C	no
TVAND.C	no
TVAR.C	no
TVASCM.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVASCS.C	no
TVASEC.C	no
TVASECH.C	no
TVASHIFT.C	no
TVASIN.C	no
TVASINH.C	no
TVASM.C	no
TVATAN.C	no
TVATAN2.C	no
TVATANH.C	no
TVAVEXP.C	no
TVAVLIN.C	no
TVBSORT.C	no
TVCBRT.C	no
TVCEIL.C	no
TVCLIP.C	no
TVCLR.C	no
TVCMERG.C	no
TVCMPRS.C	no
TVCORDIC.C	yes
TVCOS.C	no
TVCOSDPC.C	no
TVCOSH.C	no
TVCOT.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVCOTH.C	no
TVCSC.C	no
TVCSCH.C	no
TVCUBE.C	no
TVDBLINA.C	no
TVDBLINP.C	no
TVDEG.C	no
TVDIST.C	no
TVDIV.C	no
TVDIVZ.C	no
TVENVLPC	no
TVEQ.C	no
TVEXP.C	no
TVEXP10.C	no
TVEXP2.C	no
TVFILL.C	no
TVFIX.C	no
TVFLOAT.C	no
TVFLOOR.C	no
TVFRAC.C	yes
TVFREXP.C	no
TVGATHR.C	no
TVGE.C	no
TVGENP.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVGT.C	no
TVHIST.C	no
TVHISTI.C	no
TVICLIP.C	no
TVIMAG.C	no
TVINDEX.C	no
TVINTB.C	no
TVIPIMUL.C	yes
TVIRND.C	no
TVLDEXP.C	no
TVLE.C	no
TVLIM.C	no
TVLINDBA.C	no
TVLINDBP.C	no
TVLMERG.C	no
TVLOG.C	no
TVLOG10.C	no
TVLOG2.C	no
TVLSHIFT.C	no
TVLT.C	no
TVLTHR.C	no
TVMA.C	no
TVMAGS.C	yes
TVMAX.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVMAX3.C	yes
TVMAXMG.C	no
TVMIN.C	no
TVMIN3.C	yes
TVMINMG.C	no
TVMMA.C	no
TVMMS.C	no
TVMMUL.C	yes
TVMODF.C	no
TVMOV.C	no
TVMOVDP.C	no
TVMOVDPD.C	no
TVMOVPP.C	no
TVMS.C	no
TVMSCA.C	no
TVMSCS.C	no
TVMUL.C	no
TVNABS.C	no
TVNAND.C	no
TVNCO.C	yes
TVNCOARB.C	no
TVNE.C	no
TVNEG.C	no
TVNFIX.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVNMERG.C	no
TVNOR.C	no
TVNOT.C	no
TVNXOR.C	no
TVOR.C	no
TVPACK.C	no
TVPCKI.C	no
TVPFIX.C	no
TVPHASE.C	no
TVPIMUL.C	yes
TVPMERG.C	no
TVPOLY.C	no
TVPOW.C	no
TVPRN.C	no
TVPSPEC.C	yes
TVPYTHAG.C	no
TVQINT.C	no
TVQSORT.C	no
TVRAD.C	no
TVRAMP.C	yes
TVRANDN.C	no
TVRANDU.C	no
TVREAL.C	no
TVRECIP.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVRECIPZ.C	no
TVREIM.C	no
TVRFFTIP.C	no
TVRFFTS.C	no
TVROL.C	no
TVROR.C	no
TVROT.C	no
TVROUND.C	no
TVRSQRT.C	no
TVRSQRTZ.C	no
TVRSUM.C	yes
TVRVRS.C	no
TVSASM.C	no
TVSASSB.C	no
TVSCADD.C	no
TVSCATR.C	no
TVSCDIV.C	no
TVSCMA.C	no
TVSCMSB.C	no
TVSCMUL.C	no
TVSCSUB.C	no
TVSEC.C	no
TVSECH.C	no
TVSFLOAT.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVSIMP.C	yes
TVSIN.C	no
TVSINH.C	no
TVSM.C	no
TVSMSAD.C	no
TVSMSSB.C	no
TVSMVSMA.C	yes
TVSORT.C	no
TVSQ.C	no
TVSQRT.C	no
TVSQRTZ.C	no
TVSSBSA.C	no
TVSSBSM.C	no
TVSSCA.C	no
TVSSCM.C	no
TVSSM.C	no
TVSSORT.C	yes
TVSSQ.C	no
TVSUB.C	no
TVSWAP.C	yes
TVTAN.C	no
TVTANH.C	no
TVTHR.C	no
TVTHRES.C	no

Table 1: List of Routines Which Have Equivalent C Functions Within Standard Test Routines

Test Routine Name	Equivalent C Function Included Within Test Function?
TVTHRSC.C	no
TVTMERG.C	no
TVTRANS.C	yes
TVTRAPZ.C	yes
TVUNPACK.C	no
TVUNPCKI.C	no
TVUTHR.C	no
TVXCS.C	no
TVXOR.C	no
TWELCH.C	yes
TWINWTS.C	no
TWTMEAN.C	no
TZEROXNG.C	no

