

FILES PRODUCES BY THE AMCC MACROMATRIX SOFTWARE

AMCCERC.LST SUBMIT

AMCC ERC software errors and reports file. Reports include population summary and detail, internal pin count, macro occurrence and power dissipation. The end of the file contains an ERC summary, reporting on the errors and warnings generated during the previous checks. This file is a required design submission item. All errors must be removed or be accompanied by an AMCC waiver. The file is located in the ERC subdirectory. It is created by AMCCERC. This file must not be edited.

AMCCANN.LST REVIEW AND DISCARD

The AMCC Front-Annotation software writes a report on what files were generated and the status (errors or no errors). The file must show no errors found. This file is not required for design submission. It is located in the ERC subdirectory. It is created by AMCCANN.

AMCCIO.LST SUBMIT

This is the AMCC-generated list of all primary I/O signals for the circuit. It shows both fixed and added power and grounds. It is a required design submission item. It is located in the ERC subdirectory. It also provides a simultaneously switching output report which exists if the macro parameter SWGROUP has been used. The list is generated any time the ERC program is executed. This file must not be edited.

AMCCPKG.LST SUBMIT

This is the file generated after every execution of AMCCANN, the AMCC Annotation program. It contains the system capacitive load, package pin capacitance load. It may also contain user-defined commentary on switching frequency for high-frequency I/Os and non-standard ECL resistive terminations. After CIRCUIT.PKG is made available in the directory, it will also contain pin, pad and post information for final packaging. The file is located in the ERC subdirectory and is a required design submission item. AMCCANN can be repeatedly re-executed as required. AMCCPKG.LST will be regenerated each time. Except as a result of running AMCCANN, this file must not be edited.

AMCCSIMFMT.ERR REVIEW AND DISCARD

Error report file for the AMCCSIMFMT software.

AMCCVRC.LST SUBMIT, MAY BE MORE THAN ONE

This is the report produced by the AMCCVRC vector rules checker. One AMCCVRC report is required for each sampled functional or AC test simulation being submitted. Only maximum worst-case sampled files are checked. All checks must be performed and all errors removed or they must be accompanied by AMCC waivers. (Nonclocked circuits do not require the race-check.) The end of the file contains an AMCCVRC summary. AMCCVRC.LST is located in the directory from which AMCCVRC was invoked. This file must not be edited.

AMCCXREF.LST REVIEW AND DISCARD

AMCC netlister cross-reference list for renamed signals and macros. Placement uses the cross-reference name. This file is not currently required for design submission. It is located in the ERC subdirectory.

BCKMIL.ews SUBMIT  
BCKCOM.ews ews = DSY, VAL, TEG, MEN or LSR  
BCKNOM.ews  
BCKMIN.ews

These are the Back-Annotation files. They are created by AMCCANN after placement and routing. A circuit will have the MIN, NOM and either the MIL or COM file produced. Run maximum worst-case simulations for submissions using BCKMIL.ews or BCKCOM.ews. Run the minimum worst-case simulations using BCKMIN.ews. Both the maximum and the minimum Back-Annotation files are to be evaluated. The Back-Annotation simulation results define the specification for the circuit.

CIRCUIT.PKG RETURNED TO YOU

This is the file generated at AMCC after place and route has been completed. When downloaded to the workstation, it supplies AMCCANN with the actual package pin capacitance (pin by pin) as well as supplying the bonding (pin-pad-post) information for the given array in the given package. This file must not be edited.

CIRCUIT.SDI SUBMIT

This is the AMCC formatted AGIF netlist and is the input to most of the AMCC MacroMatrix software. It is required for the ERC, Front-Annotation, Back-Annotation, and AMCCVRC software. It is required for placement. It is located in the ERC subdirectory and is a required design submission item. MEDIA ONLY. This file must not be edited.

CORMIL.ews RETURNED TO YOU  
 CORCOM.ews ews = DSY, VAL, TEG, MEN or LSR  
 CORNOM.ews  
 CORMIN.ews

These are the internal delay Back-Annotation files. They are created by AMCC after placement and routing. A circuit will have the MIN, NOM and either the MIL or COM file produced. These are combined with the output capacitive load delays to form the BCKews.MEN Back-Annotation files used in the simulations.

ews = DSY, VAL, TEG, MEN or LSR

FNTMIL.ews SUBMIT  
 FNTCOM.ews ews = DSY, VAL, TEG, MEN or LSR  
 FNTNOM.ews  
 FNTMIN.ews

These are the Front-Annotation files. They are created by AMCCFRONT. A circuit will have the MIN, NOM and either the MIL or COM file produced. Run maximum worst-case simulations for submissions using FNTMIL.ews or FNTCOM.ews. Run the minimum worst-case simulations using FNTMIN.ews. Both the maximum and the minimum Front-Annotation files are required for design submission. Clearly identify which file goes to which simulations. The files are placed in the top directory. These files must not be edited.

ERROR \*.ERR FILES REVIEW AND DISCARD

The AMCC shell scripts on the EWS systems each produce one or more files which are system specific. Errors encountered are reported in an \*.ERR file and the script reports that fact to the screen. AMCCERC is the only exception, with errors reported in AMCCERC.LST.

OUTPUT.DLY SUBMIT

This is the data file created by the execution of AMCCANN. This file allows the system to keep track of previous AMCCANN edit sessions. It is located in the ERC subdirectory and is a required design submission item. It keeps track of the selected or defaulted package type, specified or defaulted package in capacitance, selected or defaulted system capacitance for TTL and for ECL outputs. It will also track the specified ECL resistive load and I/O toggle frequency. This file may be edited via AMCCANN.

TCAL.ERR (DAISY ONLY) REVIEW AND DISCARD

This is the error file for the annotation software.

## AMCC MACROMATRIX SOFTWARE

### AGIF

AMCC generic interface file formatter converts the EWS-generated netlist into a standard format that can be read by other AMCC software. The netlist is called `erc/circuit.sdi`.

### AMCCANN

The is AMCC annotation software, including a user interface to allow user-defined values to be input for output loading. The user may specify the package, the default package pin capacitance, individual package pin capacitance, default TTL system load, default ECL system load, individual pin TTL load, and individual pin ECL load. The user may also specify (for commentary use only) the I/O toggle frequency and the ECL resistive load. AMCCANN produces the data file `OUTPUT.DLY`. If the `CORxxx.ewx` files are not in the directory, AMCCANN will produce Front-Annotation files and the report file `AMCCPKG.LST`. If the `CORxxx.ewx` files are in the directory, AMCCANN will produce Back-Annotation files and the report file `AMCCPKG.LST`. Final package pin capacitance data will be included if the `CIRUCIT.PKG` file is also present.

### AMCCERC

This is the electrical rules checker, performing checks for population, connectivity, current limits, power dissipation, pin counts, wire-ORs and pin restrictions. AMCCERC will produce the reports `AMCCERC.LST`, `AMCCIO.LST` and `AMCCXREF.LST`.

#### AMCCFILUTL

DAISY-specific file utilities.

#### AMCCSIMFMT

AMCCSIMFMT, AMCC simulation file formatter, accepts EWS simulation sampled or print-on-change output files (list type) and reformats them for use as data input files for AMCCVRC and test program software. The output file from AMCCSIMFMT is a required design submission item. It is located in the same directory from which AMCCSIMFMT was invoked, usually the top of the design tree.

#### AMCCVRC

This is the vector rules checker, performing checks for differential input pairs, race conditions between clocks and data, simultaneously switching outputs, vector length, required signal inclusion, netlist crossmatch and I/O toggle check. AMCCVRC produces AMCCVRC.LST.

#### RUN\_AMCC

The super-shell included on all workstations to simplify the execution steps between schematic capture and simulation. It has been expanded to include all pre-simulation functions and to include AMCCSIMFMT and AMCCVRC. The shell produces \*.err files.