```
Change 96318 on 2003/04/17 by rramsey@rramsey_crayola_linux_orl

change Openning to Opening

Change 96278 on 2003/04/17 by scamlin@scamlin_crayola_unix_orl

.

Change 96252 on 2003/04/17 by rramsey@rramsey_crayola_linux_orl

Add new signal between sq_vtx_ctl and sq_input_arb to mark gpr_ld_busy
which fixes a deadlock condition where gpr_ld state machine is waiting
on an ack from the arb, which is waiting on vsr_ld machine not busy, which
is waiting on the gpr_ld machine to finish.
Add a reset for sp_sel in sq_vtx_ctl when the vsr_ld machine goes from ld
to idle. This is needed if there is valid data sitting in the vgt fifo since
a vsr load will happen on the following clock.
Connect pred_kill_valid bits in tb_sqsp.
Fix typo in visr_wr tracker.

Change 95859 on 2003/04/16 by rramsey@rramsey_crayola_linux_orl

fix width

Change 95847 on 2003/04/16 by rramsey@rramsey_crayola_linux_orl

script to build the verdi kdb for tb_sqsp

Change 95839 on 2003/04/16 by rramsey@rramsey_crayola_linux_orl

Multiple changes throughout the SQ to get tb_sqsp working, and to fix bugs
uncovered by the new testbench
  sq_gpr_alloc - wrap was broken for vertex side if ptr wrapped exactly at max
  sq_rbbm_interface - context/new_ld sent to constant mems was being pulled from wrong
                      side of skid buffer
  sq_pix_thread_buff - change to send context_done event back to CP on the pixel side
  buildtb, tb_sqsp, tbtrk_* - changes for new sp/spi configuration and new dump file
                              fields

Change 95810 on 2003/04/16 by dougd@dougd_r400_linux_marlboro

fixed bug in the pix_cntx counter increment signal where both event and pix were trying
to increment during the same cycle

Change 95623 on 2003/04/15 by mzini@mzini_crayola_linux_orl

New SQ trackers
```

```
Change 95621 on 2003/04/15 by mzini@mzini_crayola_linux_orl

Using an unregistered data-ready signal now to trigger compare

Change 95490 on 2003/04/14 by vromaker@vromaker_r400_linux_marlboro

fix for CFSM end-of-clause detection

Change 95457 on 2003/04/14 by danh@danh_crayola_linux_orl

       Initial Release.

Change 95404 on 2003/04/14 by rramsey@rramsey_crayola_linux_orl

Temporary fix to let flush events flow through the SC if they are not
preceded by a draw_init.
       Note flushes are still broken if you want to use them for syncing state changes,
       for example changing bad_pipe.

Change 95391 on 2003/04/14 by rramsey@rramsey_crayola_linux_orl

Change SQ_DEBUSSY option to control only SQ dumping
Add SP_DEBUSSY option to control dumping of SPs
       Add some internal trackers
       Fix width on tp_sqsp_thread_id

Change 95174 on 2003/04/11 by hartogs@fl_hartogs

Added hooked up new "thread_type" signal from SQ module. Enhanced timeout detection.

Change 94999 on 2003/04/10 by ygiang@ygiang_r400_pv2_marlboro

fixed: sq perf counter "sq_vertex_vectors_sub"

Change 94873 on 2003/04/10 by askende@askende_r400_linux_marlboro

releasing the following changes:
           1. creation of the new SPI block
           2. top level changes to support 8 SP instances
           3. tracker changes to support a few IO name changes

Change 94834 on 2003/04/09 by mmantor@mmantor_crayola_linux_orl

<fixed a problem in ptr_buff where he hangs on an event that is not a pixel event>

Change 94830 on 2003/04/09 by mmantor@mmantor_crayola_linux_orl

<SQ/SX/SP out of order thread completion and remove redundant storage in sp for sq/sx
```

communitcations some sq cfs bug fixed and texture kill mask generation and other misc
things>

Change 94724 on 2003/04/09 by mzini@mzini_crayola_linux_orl

New SQ trackers

Change 94718 on 2003/04/09 by viviana@viviana_crayola_linux_orl

SQ trackers for the sequencer control flow instructions.

Change 94518 on 2003/04/08 by vromaker@vromaker_r400_linux_marlboro

fix for bug caused by resource change between EXEC control flow
instructions

Change 94505 on 2003/04/08 by rramsey@rramsey_crayola_linux_orl

don't inc vtx thread counter if thread is an event

Change 94211 on 2003/04/07 by hartogs@fl_hartogs

Template Debussy waveform file.

Change 93959 on 2003/04/04 by vromaker@vromaker_r400_linux_marlboro

temporarily disabled PVPS src select swizzle because it was causing SP tests
       from Andi's mini_regress to fail

Change 93788 on 2003/04/03 by dougd@dougd_r400_linux_marlboro

added event_context register to correctly capture context when sending a vtx event to
the thread buffer.

Change 93640 on 2003/04/03 by hartogs@fl_hartogs

Added include file "vgt_reg.v" to prevent compiler errors during Modelsim compile.
   Fixed wire definition to match output port definition.

Change 93585 on 2003/04/03 by dougd@dougd_r400_linux_marlboro

move event filters to inputs of SQ in ptr_buff and vtx_ctl and remove from
thread_buff_cntl, modify cntx0-17 busy counters in ptr_buff to use new event logic, add
RST_VTX_CNT functionality to sq_vtx_ctl, add SQ_CP_event and SQ_RB event functionality
to pix_thread_buff and vtx_thread_buf, remove obsolete SQ_CP_event functionality from
thread_buff_cntl.

Change 93489 on 2003/04/02 by vromaker@vromaker_r400_linux_marlboro

```
added end of clause detection for serialization and resource change to CFSM;
fix for first_in_clause related to PVPS detection;
added SQ_SP_thread_type and SQ_TP_thread_type outputs to sq.v;
added predicate to Tex IQ - now predicate goes from TCFS, thru TIF, thru TIQ, to the
TIS;
removed q1 pipeline stage for SP predicate data in AIS Output;

Change 93099 on 2003/04/01 by hartogs@fl_hartogs

Fixed logic that holds off SC injector.
   Fixed bug in threaded empty signal for tp_sqsp_dmp_not_empty.
   Hacked logic that frees state contexts so that it sorta works.

Change 93054 on 2003/04/01 by rramsey@rramsey_crayola_linux_orl

PV/PS determinations need to be made on post-swizzled component selects

Change 93053 on 2003/04/01 by dougd@dougd_r400_linux_marlboro

added context_id or state to event info stored in the status_reg to correct a bug in
the state logic supporting cntx0 and cntx17 busy

Change 93026 on 2003/03/31 by grayc@grayc_crayola_linux_orl

   minor changes for gc testbench

Change 92970 on 2003/03/31 by dougd@dougd_r400_linux_marlboro

added pix event_id to qualify events to increment the cntx17 busy counter. Also added
`include "vgt_reg.v" and removed hard coded parameters.

Change 92904 on 2003/03/31 by hartogs@fl_hartogs

Added TP_SP latency controls requested by Mantor.

Change 92884 on 2003/03/31 by hartogs@fl_hartogs

Cleaned-up some "TODO" items.

Change 92679 on 2003/03/28 by hartogs@fl_hartogs

Hooked-up new thread-id ports on SQ. Testbench should now handle most tests.

Change 92451 on 2003/03/27 by hartogs@fl_hartogs

Added several missing input ports to sub-modules.
```

Change 92428 on 2003/03/27 by hartogs@fl_hartogs

Deleted reduntant wire declaration that was causing an error in modelsim.
   Added explicit declarations for a bunch of implicitly used wires. The lack of the explicit declarations was causing warnings in Modelsim.

Change 92324 on 2003/03/27 by dougd@dougd_r400_linux_marlboro

fixed bug with address wrapping in the gpr_wr_addr generation for pix and vtx

Change 92303 on 2003/03/27 by mmantor@mmantor_crayola_linux_orl

<export_id expanded from one to four bit, end_of_clause added to CFS-TIF interface and last_in_clause flag passed down with instruction to eventually trigger a free_done. thread_id outputs added to the SQ_SP and SQ_TP interfaces for testbench, and added sq_sx control signals for exp_table read >

Change 92262 on 2003/03/26 by hartogs@fl_hartogs

Added untested code for random backpressure on the SQ_TP interface.
   Added untested code for random starve pressure on the TP_SP interface.

Change 92142 on 2003/03/25 by hartogs@fl_hartogs

This version passes milestone_tri. Trackers and injectors are ready for multi-threading when those signals become available.

Change 92139 on 2003/03/25 by hartogs@fl_hartogs

This version passes the "milestone_tri" test completely. First working version for texture fetch.

Change 91978 on 2003/03/25 by hartogs@fl_hartogs

Incremental check-in. This version will run "milestone_tri" to completion (including injecting the texture fetch data); however the simulation mismatches on the SPSX tracker.

Change 91977 on 2003/03/25 by hartogs@fl_hartogs

Changed "check flags" on one of the SQ memories to minimize garbage output during simulation.

Change 91976 on 2003/03/25 by hartogs@fl_hartogs

Changed dump file name from tp_sq.dmp to tp_sqsp.dmp.

Change 91763 on 2003/03/24 by hartogs@fl_hartogs

Qualified use of "q_skid_rbbm_a" with "!q_skid_empty". This was done to avoid X's on "sel_gfx_vgt_draw_initiator" which corrupted a counter "map_copy_cntr". The corruption of "map_copy_cntr" could only be corrected by reset.

Change 91754 on 2003/03/24 by rramsey@rramsey_crayola_linux_orl

Fix for gpr write tracker

Change 91569 on 2003/03/21 by dougd@dougd_r400_linux_marlboro

added Real Time input to each of the constant store to enable the correct addressing of RT constants from the SQ

Change 91422 on 2003/03/20 by dougd@dougd_r400_linux_marlboro

fixed bugs in the rbi_rd_state machine

Change 91219 on 2003/03/20 by dougd@dougd_r400_linux_marlboro

fix bug in real time write address logic

Change 91126 on 2003/03/19 by dougd@dougd_r400_linux_marlboro

fixed bug in incrementing pix_cntx17_cnt with back to back events

Change 90960 on 2003/03/19 by smoss@smoss_crayola_linux_orl

   added new sq trackers

Change 90915 on 2003/03/19 by dougd@dougd_r400_linux_marlboro

added I/O TEST PORTS for bist and scan

Change 90861 on 2003/03/19 by rramsey@rramsey_crayola_linux_orl

Changes to sp_sel and valid logic to get bad_pipe working

Change 90773 on 2003/03/18 by dougd@dougd_r400_linux_marlboro

added logic to drive SQ_CNTX0_BUSY, SQ_CNTX17_BUSY. This change should complete this functionality.

Change 90733 on 2003/03/18 by dougd@dougd_r400_linux_marlboro

added counters and control for pix cntx0, cntx17 busy

Change 90622 on 2003/03/17 by hartogs@fl_hartogs_linux

First crack at VCS build script for tb_sqsp

Change 90551 on 2003/03/17 by dougd@dougd_r400_linux_marlboro

added code in sq_status_reg to decement the thread counters in sq_vtx_cntl used for
SQ_CNTX0_busy, SQ_CNTX17_busy

Change 90313 on 2003/03/14 by hartogs@fl_hartogs

Added multi-threaded code to tbtrk_sqtp.v. (Thread id and type are hard-coded to 0 and
1, respectively, until these signals are available from the sq.)
   Fixed port name typos in tbtrk_spsx.v.

Change 90002 on 2003/03/13 by viviana@viviana_crayola_linux_orl

Corrected some signal paths to work at the gc level testench.

Change 89954 on 2003/03/13 by viviana@viviana_crayola_linux_orl

Tracker to test the interface between the Vertex Input Control of the sq and the
   VSR's of the SP, during a write.

Change 89810 on 2003/03/12 by hartogs@fl_hartogs

Minor corrections to tbtrk_sqtp.
   Modularized the SP/SX tracker.

Change 89746 on 2003/03/12 by hartogs@fl_hartogs

Modularized the SQTP tracker (per Chris Gray's request).

Change 89740 on 2003/03/12 by hartogs@fl_hartogs

Somehow this one slipped through the cracks. This one should have been changed when the
"pc_free_cnt_q" signal width
   was increased from 7 to 8 bits.

Change 89588 on 2003/03/11 by hartogs@fl_hartogs

Added tp_sq.dmp to list.

Change 89538 on 2003/03/11 by hartogs@fl_hartogs

Interim Check-in

Change 89518 on 2003/03/11 by hartogs@fl_hartogs

Dummy files currently uses by tb_sqsp testbench.

Change 89516 on 2003/03/11 by hartogs@fl_hartogs

Interim check-in.

Change 89515 on 2003/03/11 by hartogs@fl_hartogs

Changed "pc_free_cnt_q" to 8 bits so that it could represent the maximum free count of 128. Propagated this change to
   ss/sq_status_reg.v and to ss/sq_vtx_thread_buff.v. Added ifdef SIM code to check for overflow and underflow of this
   counter.
   Added condition for simultaneous occurrance of pc_alloc and pb_dealloc_vld.

Change 89474 on 2003/03/11 by vromaker@vromaker_r400_linux_marlboro

change to make texture requests wait on alu_instr_pending

Change 89448 on 2003/03/10 by mmantor@mmantor_crayola_linux_orl

<1. Added timestamp to dum_mem read and write from same location error message. 2. Moved flat/gouroud shading and provoking vertex to sq-pc from the sx and worked on ptr instead of data 3.Added control for the texture cylinderical wrapsubcycling. 4. Add rt parameter cache ptr selection in sq 5.Clamped and wrapped pc_ptrs in sq 6. Added support for points and lines in the parameter cache ptr determination. 7. prep seperate write address for export to memory 8. tmp fix for deallocation of export memory deallocation. 9. remove some old comment out code and redundant logic >

Change 89039 on 2003/03/07 by dougd@dougd_r400_linux_marlboro

added `include "register_addr.v"

Change 88929 on 2003/03/06 by vromaker@vromaker_r400_linux_marlboro

fix to CFS that prevents a new thread from entering when the thread ID
in the input pipe stage is different than the thread ID in the output pipe stage;
also changed triangle size to 150 for sq_tests test case pred_eq_vec

Change 88816 on 2003/03/06 by dougd@dougd_r400_linux_marlboro

added ports to support cntx0_busy, cntx17_busy

Change 88639 on 2003/03/05 by vromaker@vromaker_r400_linux_marlboro

a few minor updates, mostly comment related; added q2 verison of
state_head_ptr for use in state read addr calcualtion in vtx thread buff

Change 88552 on 2003/03/05 by dougd@dougd_r400_linux_marlboro

needed to subtract RT base address (`SQ_FETCH_RT_0) from incoming address for RT writes
and reads.

Change 88512 on 2003/03/05 by rramsey@rramsey_crayola_linux_orl

Fix a bug with the valid bit inits that was causing tri128_pix4 to fail
Change the vsr_ld machine to alternate between buf0 and buf1 so pattern
is deterministic and can be compared vs emulator

Change 88400 on 2003/03/04 by vromaker@vromaker_r400_linux_marlboro

fix for dealloc_space width; status register and thread buffer updates for
status register writes; status register fix for clearing the event_valid (and all
other bits) on a pop; new_thread flag now generated in the instr fetch module and
send dowm thru the AIQ; fix for the setting of thread_valid status

Change 88117 on 2003/03/03 by hartogs@fl_hartogs

Added dum_mem_p2 model back into the code with USE_BEHAVE_MEM compiler directive.

Change 87997 on 2003/03/03 by dougd@dougd_r400_linux_marlboro

missing term in eqn for skid_re_hold for tex_rt_rd caused tex_rt_rd_req to assert for
only 1 cycle and not wait for the data ack

Change 87726 on 2003/02/28 by vromaker@vromaker_r400_linux_marlboro

another merge fix

Change 87675 on 2003/02/28 by rramsey@rramsey_crayola_linux_orl

Change cf machine to use program_base derived off of isr, and then
register that value on load_osr for sending to the tip

Change 87632 on 2003/02/28 by vromaker@vromaker_r400_linux_marlboro

another merge fix

Change 87622 on 2003/02/28 by vromaker@vromaker_r400_linux_marlboro

bad merge - retry...

Change 87620 on 2003/02/28 by vromaker@vromaker_r400_linux_marlboro

MOVA related change - due to the extra cycle required by SP for timing,
had to conditionally mux the interface register on the last phase of the address

load into the constant waterfalling logic (to be used instead of last quarter
of the address register since the start of the CWF logic now overlaps the
address register load by one cycle)

Change 87440 on 2003/02/27 by mmang@mmang_crayola_linux_orl

Predicated parameter cache writes.

Change 87408 on 2003/02/27 by vromaker@vromaker_r400_linux_marlboro

Change 87398 on 2003/02/27 by donaldl@donaldl_crayola_linux_orl

Created early version of pix_winner_q going from sq_alu_thread_arb to
sq_pix_thread_buff in order to create a registered version of alu_winner_final.
Done to reduce critical path of the allocation_available signals in
sq_exp_alloc_ctrl.v

Change 87269 on 2003/02/27 by donaldl@donaldl_crayola_linux_orl

Removed allocation of 48 locations for vtx pass thru

Change 87207 on 2003/02/26 by hartogs@fl_hartogs

Added comments that question a few lines of code.
   Added ifdef SIM check for overflow and underflow on the the pc_free_cnt_q signal.

Change 87206 on 2003/02/26 by hartogs@fl_hartogs

Changed dealloc_cnt signal going into the event fifo so that it is masked-out (zeroed)
for two_clock_xfer that is not end_of_buiffer. This change was made because I observed
the logic push the new signal into the event fifo with the dealloc count, and then
pushing the dealloc count in again with the pix_vector_valid signal later.
   Changed ef_pop signal so that it will not pop a non-zero dealloc unless the new bit
is not set. This change was made because the absence of the change above allowed a new
signal to go in with a non-zero dealloc_cnt which was then permaturely popped instead
of waiting for the vertex vector to be done.
   Added some TODO comments for some hardcoded parameters that should come from autoreg
include files.
   Added some ifdef SIM code that checks for under flow of vtx_sync_cnt_q (which was an
observable result of the problems above).

Change 87184 on 2003/02/26 by dougd@dougd_r400_linux_marlboro

when vgt_end_of_vector occurs on the 1st and only data, the data sent to the SP is
delayed by 1 cycle but the vsr_wrt_addr was not. Fixed

Change 86670 on 2003/02/25 by vromaker@vromaker_r400_linux_marlboro

fixed gpr address calculation for CONST scalar opcodes

Change 86509 on 2003/02/24 by dougd@dougd_r400_linux_marlboro

corrected error introduced in the last version

Change 86412 on 2003/02/24 by dougd@dougd_r400_linux_marlboro

fixed bit width mismatch in the wrt addr assignment when doing RT

Change 86136 on 2003/02/21 by dougd@dougd_r400_linux_marlboro

fixed bug in o_vector_valid - it counted a single vert as two when there was only one
vert in the vector and end_of_vector was also asserted.

Change 86121 on 2003/02/21 by vromaker@vromaker_r400_linux_marlboro

changed context_id (state) used for CFC reads to be that from the input
pipeline register

Change 86092 on 2003/02/21 by vromaker@vromaker_r400_linux_marlboro

added code to disable PVPS detection on 2nd thru last iterations of a
const waterfall loop; added last_in_shader output from CFS that is separate
from the cfs_last_instr status bit that is sent back to the thread buffer

Change 85975 on 2003/02/21 by hartogs@fl_hartogs

The version has code in the testench to track the SX buffer availability and to free
buffers after
the SP has exported the data to the SX. It also has the SQ/SP instruction interface
time de-multiplexed
and split out by field.

Change 85737 on 2003/02/20 by donaldl@donaldl_crayola_linux_orl

Fixed alu_req equation for handling last_instr_q and first_thread_q.
Changed nxt_pix_last_alloc counter to nxt_pix_last counter.

Change 85660 on 2003/02/20 by vromaker@vromaker_r400_linux_marlboro

updated fifo ctl to output a registered count, and changed the ctl
logic to use the counter for full, empty, etc.

Change 85659 on 2003/02/20 by vromaker@vromaker_r400_linux_marlboro

now enable PVPS detection only on 2nd to last consective instructions

of a thread; also added more support for MUL_CONST (force src_c_sel.x to GPR)

Change 85653 on 2003/02/20 by vromaker@vromaker_r400_linux_marlboro

fixed so that only vertex valid bits are swapped (pixel valid bits are
swapped on input from SC)

Change 85650 on 2003/02/20 by vromaker@vromaker_r400_linux_marlboro

fixed thread changed detection logic - the first_in_group and last_in_group
outputs now mark the start and end of an uninterrupted stream of target instructions
from the same thread

Change 85640 on 2003/02/20 by vromaker@vromaker_r400_linux_marlboro

reorderd LOD correction bits to match valid_bits

Change 85595 on 2003/02/20 by scamlin@scamlin_crayola_unix_orl

added testreg

Change 85525 on 2003/02/20 by scamlin@scamlin_crayola_unix_orl

change test port name

Change 85487 on 2003/02/20 by dougd@dougd_r400_linux_marlboro

fixed bug in "double mode" vsr address generation. Also added logic to choose correct
SP from the IDLE state when some SP's have been disabled by the BAD_SP bits.

Change 85405 on 2003/02/19 by dougd@dougd_r400_linux_marlboro

modified system_sq.vcpp and vcs.ini to find the new virage hs memories. Backed out the
new hs ram in texconst because it doesn't work.

Change 85398 on 2003/02/19 by pmitchel@pmitchel_r400_laptop

recovering deleted file

Change 85337 on 2003/02/19 by scamlin@scamlin_crayola_unix_orl

delete these files and use the _rtl.v versions

Change 85336 on 2003/02/19 by scamlin@scamlin_crayola_unix_orl

new virage hs memories
modified default parameter values to work around a synthesis hang

Change 85215 on 2003/02/19 by donaldl@donaldl_crayola_linux_orl

Added nxt_pix_alloc and nxt_pix_last_alloc counters.

Change 85031 on 2003/02/18 by vromaker@vromaker_r400_linux_marlboro

'last' optimization within EXEC_END added; also fixed last so that without
optimization, it will be set on the last target instruction in the EXEC_END (was
setting it on the first instruction of an EXEC_END, which for the majority of
our tests is the same as the last instruction of an EXEC_END)

Change 84707 on 2003/02/16 by vromaker@vromaker_r400_linux_marlboro

the EXSM was draining valid instructions from the exec ppb on a thread buffer update -
fixed by
adding the thread id to the ppb, then checking it to see if it is the same as
the thread that's being updated before removing it (if the thread id is
different then it is not removed and the drain is complete)

Change 84689 on 2003/02/16 by vromaker@vromaker_r400_linux_marlboro

another CFS fix - this time for subroutine calls, but in general it should affect all
flow control instructions

Change 84625 on 2003/02/15 by vromaker@vromaker_r400_linux_marlboro

fix for loops - was using nest_level from the register that was changed to the output
pipe stage

Change 84577 on 2003/02/14 by ygiang@ygiang_r400_pv2_marlboro

added: more sq performance counters

Change 84449 on 2003/02/14 by mmang@mmang_crayola_linux_orl

Made init_pred dependent upon new_thread instead of first_in_group.

Change 84438 on 2003/02/14 by dougd@dougd_r400_linux_marlboro

changed logic for exp_buf_empty to used only the buffer counts and not their control
(update) signals. This signal is used to turn off the clocks for the SP,SX and TP.

Change 84436 on 2003/02/14 by dougd@dougd_r400_linux_marlboro

added logic and wires up to sq to provide events to trigger the perfmon counters

Change 84405 on 2003/02/14 by vromaker@vromaker_r400_linux_marlboro

minor updates: some comments added/removed; also removed winner_ack input from status reg

Change 84304 on 2003/02/13 by vromaker@vromaker_r400_linux_marlboro

removed some commented out code from ais_output; added a pipeline stage to the ctl_flow_seq and decoupled the CFS and EXEC state machines - the arbiters now issue a thread every four cycles

Change 84229 on 2003/02/13 by ygiang@ygiang_r400_pv2_marlboro

added: more sq perf counters

Change 84111 on 2003/02/13 by dougd@dougd_r400_linux_marlboro

fixed a bug in the VGT_SQ interface to allow both _indx_valid and _end_of_vector on the first and only data transfer of a vector. Also added a simulation only protocol monitor to detect _end_of_vector when no data at all had been sent for the vector.

Change 83696 on 2003/02/11 by ygiang@ygiang_r400_pv2_marlboro

added: more performance counters for sq

Change 83645 on 2003/02/11 by hartogs@fl_hartogs

Update. Testbench can run non-fetch tests.

Change 83482 on 2003/02/11 by dougd@dougd_r400_linux_marlboro

changed sq_vtx_thread_buffer to use the status_reg at state_head_ptr_q for events instead of always using status_data_0

Change 83434 on 2003/02/10 by donaldl@donaldl_crayola_linux_orl

Updated nxt_pos_alloc_incr and nxt_pc_alloc_incr equations to use thread_valid_q instead of alu_req to validate them.

Change 83323 on 2003/02/10 by hartogs@fl_hartogs

Updated... still in progress.

Change 83322 on 2003/02/10 by hartogs@fl_hartogs

Added unconnected port to modules with new perfmon signals.

Change 83315 on 2003/02/10 by vromaker@vromaker_r400_linux_marlboro

minor updates (a few comment changes, insignificant code change)

Change 83246 on 2003/02/10 by vromaker@vromaker_r400_linux_marlboro

fix for bug 1255 - src c z swizzle set to src c x swizzle for dot2add

Change 83159 on 2003/02/09 by dougd@dougd_r400_linux_marlboro

perfmon signals

Change 83028 on 2003/02/08 by vromaker@vromaker_r400_linux_marlboro

fixed pos and pc alloc terms by using winner_sel instead of winner_ack

Change 83012 on 2003/02/07 by donaldl@donaldl_crayola_linux_orl

Added next parameter cache allocation counter.

Change 83008 on 2003/02/07 by vromaker@vromaker_r400_linux_marlboro

some kill/pred fixes

Change 83001 on 2003/02/07 by dougd@dougd_r400_linux_marlboro

rbi_addr in was shifted down by two bits incorrectly.

Change 82694 on 2003/02/06 by dougd@dougd_r400_linux_marlboro

brought signals up to sq for perfmon

Change 82630 on 2003/02/06 by donaldl@donaldl_crayola_linux_orl

Created exp_buf_empty signal to indicate the export buffers are empty.
This replaces the old SX-SQ export buffer interface signals with the new ones.

Change 82515 on 2003/02/06 by vromaker@vromaker_r400_linux_marlboro

ALU IQ gpr address wrapping; MUL_CONST support; DOT2ADD fix

Change 82428 on 2003/02/06 by donaldl@donaldl_crayola_linux_orl

Created next position allocation counter to determine if all positions have
been allocated for the previous threads.

Change 82207 on 2003/02/05 by vromaker@vromaker_r400_linux_marlboro

tex IQ gpr address wrapping; removal of pop_pending logic

Change 82200 on 2003/02/05 by scamlin@scamlin_crayola_unix_orl

forgot these fuseboxes

Change 82192 on 2003/02/05 by hartogs@fl_hartogs

Changed wire declaration to match associated port declaration.

Change 82190 on 2003/02/05 by hartogs@fl_hartogs

Changed to reflect changes in unit under test.

Change 82186 on 2003/02/05 by hartogs@fl_hartogs

Deleted extra comma at the end of the argument list. THis comma was creating a port mis-match during sim load.

Change 82113 on 2003/02/05 by dougd@dougd_r400_linux_marlboro

internal module signals brought up to sq level for perfmon

Change 81944 on 2003/02/04 by donaldl@donaldl_crayola_linux_orl

Changes for new SX-SQ export buffer availability interface.

Change 81943 on 2003/02/04 by donaldl@donaldl_crayola_linux_orl

Changes for new SX-SQ export buffer availability interface.

Change 81893 on 2003/02/04 by dougd@dougd_r400_linux_marlboro

fix bug in rt wrt logic

Change 81633 on 2003/02/03 by vromaker@vromaker_r400_linux_marlboro

fixed alu phase for ld_pred

Change 81624 on 2003/02/03 by vromaker@vromaker_r400_linux_marlboro

new one-clk ld_pred signal

Change 81559 on 2003/02/03 by vromaker@vromaker_r400_linux_marlboro

misc updates

Change 81558 on 2003/02/03 by dougd@dougd_r400_linux_marlboro

corrected a typo to the last submit

Change 81528 on 2003/02/03 by dougd@dougd_r400_linux_marlboro

added input regs to TP_SQ_thread_id and TP_SQ_stall

Change 81249 on 2003/02/01 by vromaker@vromaker_r400_linux_marlboro

misc updates - need latest merged versions of files...

Change 81227 on 2003/01/31 by vromaker@vromaker_r400_linux_marlboro

inverted kill mask data from SP

Change 81099 on 2003/01/31 by rramsey@rramsey_crayola_linux_orl

change arbitration policy for sq instruction store so each client has
its own phase in the 8 clock cycle, with CP accesses happening
opportunistically

Change 80876 on 2003/01/30 by vromaker@vromaker_r400_linux_marlboro

pred_override update (for waterfall); instr store read requests output from CFS and TIF

Change 80801 on 2003/01/30 by dougd@dougd_r400_linux_marlboro

fixed typos that caused warnings in synopsys

Change 80742 on 2003/01/30 by dougd@dougd_r400_linux_marlboro

removed reset from the register for VGT_send and VGT_event to comply with convention of
block input going only to input of one register and no gates

Change 80731 on 2003/01/30 by dougd@dougd_r400_linux_marlboro

added ati_dff_in to ROM_SPx_disable_vtx, TP_SQ_data_rdy, TP_SQ_type

Change 80540 on 2003/01/29 by hartogs@fl_hartogs

Added SC tracker (tbtrk_sc) to the tb_sqsp testbench.

Change 80494 on 2003/01/29 by donaldl@donaldl_crayola_linux_orl

Initial

Change 80177 on 2003/01/28 by mmantor@FL_mmantorLT_r400_win

got basic sc stimulas to work for sq/sp test bench and reset multipass counter during
reset

Change 80168 on 2003/01/28 by vromaker@vromaker_r400_linux_marlboro

fix for 48:16 priority mux

Change 80102 on 2003/01/28 by hartogs@fl_hartogs

Added sc_iterator module wrapped specifically for sqsp testbench.

Change 80057 on 2003/01/28 by vromaker@vromaker_r400_linux_marlboro

updates for mova, kill mask, absolute constants

Change 79927 on 2003/01/28 by dougd@dougd_r400_linux_marlboro

fixed bug in vsr_ld_state VSR_LD

Change 79871 on 2003/01/28 by dougd@dougd_r400_linux_marlboro

corrected range on sp_prd_data_q[15:0] from [i] to [i-48] in for loop

Change 79731 on 2003/01/27 by dougd@dougd_r400_linux_marlboro

fixes bug where vsr_ld_state gets stuck in state VSR_LD

Change 79716 on 2003/01/27 by vromaker@vromaker_r400_linux_marlboro

fix for thread arbiter priority encoder; updates to kill mask and predicate loading
from SP

Change 79542 on 2003/01/26 by dougd@dougd_r400_linux_marlboro

added inputs i_rbi_rt_rd_req and address logic to support diagnostic read support for
Real Time

Change 79540 on 2003/01/26 by dougd@dougd_r400_linux_marlboro

fixed typo that produced latches in synthesis

Change 79498 on 2003/01/25 by vromaker@vromaker_r400_linux_marlboro

updates for kill mask

Change 79443 on 2003/01/25 by hartogs@fl_hartogs

Made two wire declarations match their associated port declarations.

Change 79383 on 2003/01/24 by dougd@dougd_r400_linux_marlboro

changes to SQ_FLOW_CONTROL register

Change 79347 on 2003/01/24 by dougd@dougd_r400_linux_marlboro

fixed bug in vgt interface (end_of_vtx_vector can be valid when indx_valid is not)

Change 78932 on 2003/01/23 by dougd@dougd_r400_linux_marlboro

changes necessary to simulate with rf rams from latest virage compiler

Change 78924 on 2003/01/23 by donaldl@donaldl_crayola_linux_orl

Initial

Change 78850 on 2003/01/23 by scamlin@scamlin_crayola_unix_orl

add rtl versions

Change 78849 on 2003/01/23 by scamlin@scamlin_crayola_unix_orl

add rtl version

Change 78805 on 2003/01/23 by dougd@dougd_r400_linux_marlboro

replaced latest version of this virage rf ram with the one from previous virage
compiler because latest version doesn't work

Change 78788 on 2003/01/23 by mmantor@mmantor_crayola_linux_orl

<fixed bugs created by seperation of alloc machine and interp machine to align all data
to the sx and sp interfaces and moved thread counter after delay pipe>

Change 78700 on 2003/01/22 by vromaker@vromaker_r400_linux_marlboro

fixes for pred_set/kill; tex_arb_policy added

Change 78428 on 2003/01/22 by scamlin@scamlin_crayola_unix_orl

virage a04 new register files

Change 78427 on 2003/01/22 by scamlin@scamlin_crayola_win

mod for a04

Change 78248 on 2003/01/21 by hartogs@fl_hartogs

Updated for VGT and RBBM stimulus.
Updated for changes in unit under test.

Change 78247 on 2003/01/21 by hartogs@fl_hartogs

Added this port to the instance "uscalar" to file sp/vector/sp_vector.v.
       .oPRED_SET_EXECUTE(), // TODO -- added unconnected output port to avoid warnings during sim load
Apparently the sp_scalar_lut module added an output port (single bit).

Also added these ports to the instance "u_sq_tex_ctl_flow_seq" in sq.v
     .ais_update(),// listed unconnected port to avoid load warning
     .ais_thread_id(),// listed unconnected port to avoid load warning
ais_update is single bit, and ais_thread_id is 6 bits.

Change 78147 on 2003/01/21 by ygiang@ygiang_r400_pv2_marlboro

added: SQ performance counters

Change 77896 on 2003/01/20 by vromaker@vromaker_r400_linux_marlboro

fix for opt. const waterfall (const sel delayed one cycle)

Change 77794 on 2003/01/19 by vromaker@vromaker_r400_linux_marlboro

fix for const waterfall optimization (decode signal was missing a bit); also fix for multiple free_done

Change 77751 on 2003/01/18 by mmantor@mmantor_crayola_linux_orl

<fixed a bug with sc_sample_cntrl by adding an isr register version to mantain during interpolation while the alloc machine moves ahead. Also fixed the context_id in the event fifo for 2clk transfers>

Change 77460 on 2003/01/17 by vromaker@vromaker_r400_linux_marlboro

fix for early push into exec ppb - was pushing conditional executes without testing the condition...

Change 77449 on 2003/01/17 by mmantor@mmantor_crayola_linux_orl

<fixed a buf with ij read address generation when using centers and centroids, sent free_buff a clock earlier so they (cneters and centriods can run at rate continously and added flow control to the alloc sm for max_pass_rd_cnt independant of pb_rts >

Change 77428 on 2003/01/17 by vromaker@vromaker_r400_linux_marlboro

fix for Exec SM state EX_NEXT_CFI - if ppb_op is not ALLOC, assumes it's some type of EXEC and jumps to EXEC

Change 77426 on 2003/01/17 by vromaker@vromaker_r400_linux_marlboro

another fix for tmp_max_rd_pass_cnt (had to be delared as 2 bits before the PPB)

Change 77421 on 2003/01/17 by dougd@dougd_r400_linux_marlboro

added ports to sq_rbbm_interface and wires to support rbbm access for the new
sq_perfmon module

Change 77419 on 2003/01/17 by vromaker@vromaker_r400_linux_marlboro

fix for max_rd_pass count

Change 77199 on 2003/01/16 by vromaker@vromaker_r400_linux_marlboro

update for mova interface

Change 77182 on 2003/01/16 by vromaker@vromaker_r400_linux_marlboro

Change 77173 on 2003/01/16 by vromaker@vromaker_r400_linux_marlboro

Change 77133 on 2003/01/16 by scamlin@scamlin_crayola_win

.

Change 77107 on 2003/01/16 by mmantor@mmantor_crayola_linux_orl

<Fixed performance bug preventing at rate interpolation with two interpolants>

Change 76992 on 2003/01/15 by fhsien@fhsien_r400_linux_marlboro

Change MES_ALL parameter for more virage memory

Change 76991 on 2003/01/15 by dougd@dougd_r400_linux_marlboro

fixed typo in last submit of this file

Change 76949 on 2003/01/15 by askende@askende_r400_linux_marlboro

releasing top IO changes related to the new Export Status Control interface between SQ
and SX

Change 76829 on 2003/01/15 by dougd@dougd_r400_linux_marlboro

added SX_SP_exp_buf_avail, SX_SQ_exp_count_rdy to support clock gating

Change 76813 on 2003/01/15 by vromaker@vromaker_r400_linux_marlboro

CFS now looks at ais_update to clear alu_instr_pending; also const waterfall fixes

Change 76810 on 2003/01/15 by fhsien@fhsien_r400_linux_marlboro

Change MES_ALL parameter to OFF

Change 76802 on 2003/01/15 by scamlin@fl_regress_p4j_crayola_win

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Change 76791 on 2003/01/15 by dougd@dougd_r400_linux_marlboro

some of the TP,SP,SX clock gating logic added

Change 76773 on 2003/01/15 by dougd@dougd_r400_linux_marlboro

delete obsolete files

Change 76676 on 2003/01/14 by scamlin@scamlin_crayola_win

update hs ports

Change 76588 on 2003/01/14 by scamlin@scamlin_crayola_win

virage star simulation

Change 76327 on 2003/01/13 by vromaker@vromaker_r400_linux_marlboro

Change 76236 on 2003/01/13 by dougd@dougd_r400_linux_marlboro

fixed bug that loaded v_gpr_addr and v_gpr_base too early

Change 76086 on 2003/01/12 by dougd@dougd_r400_linux_marlboro

adding missing signal to sensitivity list

Change 76016 on 2003/01/11 by vromaker@vromaker_r400_linux_marlboro

fixes for constant waterfalling

Change 75969 on 2003/01/10 by hartogs@fl_hartogs

Added unconnected ports in instantiations to avoid warning message while loading into
the simulator.

Change 75887 on 2003/01/10 by dougd@dougd_r400_linux_marlboro

routed gated clocks from sq_rbbm_interface up to sq.v and then back to get around a problem with Power Compiler

Change 75798 on 2003/01/10 by dougd@dougd_r400_linux_marlboro

fixed bug with fifo control when the SP GPRs are full

Change 75472 on 2003/01/09 by dougd@dougd_r400_linux_marlboro

changed "input [0:0] sclk_global" to "input sclk_global" to prevent problems with synopsys

Change 75456 on 2003/01/09 by vromaker@vromaker_r400_linux_marlboro

re-release of AIQ, AIS, and CFS; mova dependency stall added

Change 75419 on 2003/01/08 by hartogs@fl_hartogs

First submission -- no trackers / no injector / no synchro-nothing. Just an SQ and four SP's

Change 75418 on 2003/01/08 by hartogs@fl_hartogs

Fixed not-smart compiler error that shows up in Modelsim (but presumably not in VCS).

Change 75417 on 2003/01/08 by vromaker@vromaker_r400_linux_marlboro

testing

Change 75416 on 2003/01/08 by vromaker@vromaker_r400_linux_marlboro

testing

Change 75398 on 2003/01/08 by vromaker@vromaker_r400_linux_marlboro

what the heck again

Change 75397 on 2003/01/08 by vromaker@vromaker_r400_linux_marlboro

what the heck is going on with sq_alu_instr_seq.v

Change 75344 on 2003/01/08 by dougd@dougd_r400_linux_marlboro

edit comments

Change 75343 on 2003/01/08 by dougd@dougd_r400_linux_marlboro

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changes for vgt-sq-sp vertex vector loading performance improvement

Change 75340 on 2003/01/08 by vromaker@vromaker_r400_linux_marlboro

fix for NOP in CFS; reduced triangle size in sq_tests

Change 75023 on 2003/01/07 by dougd@dougd_r400_linux_marlboro

fixed bug in d_rtr when data_cnt == 2

Change 74776 on 2003/01/06 by vromaker@vromaker_r400_linux_marlboro

fix for bug1035: tgt instr fetch updated to pass last_in_group correctly

Change 74489 on 2003/01/04 by dougd@dougd_r400_linux_marlboro

"interp_cnt_q =" was changed to  "interp_cnt_q <="

Change 74435 on 2003/01/03 by dougd@dougd_r400_linux_marlboro

removed unused signal from port lists

Change 74403 on 2003/01/03 by vromaker@vromaker_r400_linux_marlboro

fix for bug 1011 (last_in_group/last_in_shader issues with multiple consecutive EXEC's,
and multiple instr's in the last EXEC)

Change 74242 on 2003/01/02 by vromaker@vromaker_r400_linux_marlboro

added last optimiztion enable to exec ppb

Change 74199 on 2003/01/02 by vromaker@vromaker_r400_linux_marlboro

more fixes for milestone_tri (gpr_base was off for both gpr read and write)

Change 74166 on 2003/01/02 by vromaker@vromaker_r400_linux_marlboro

fixes for milestone_tri tests

Change 74008 on 2003/01/01 by vromaker@vromaker_r400_linux_marlboro

split the pixel input state machine in two

Change 73136 on 2002/12/23 by dougd@dougd_r400_linux_marlboro

added output o_sq_soft_srst to sq_rbbm_interface
```

Change 72904 on 2002/12/20 by vromaker@vromaker_r400_linux_marlboro

fix for pix_ctl (buff_swap used instead of free_buff in ptr_buff)

Change 72839 on 2002/12/20 by vromaker@vromaker_r400_linux_marlboro

more pix_ctl (pc) and vtx_ctl (vc) stuff; added some _q's to registered signal names;
made performance chages to pix_ctl (pism)

Change 72723 on 2002/12/20 by vromaker@vromaker_r400_linux_marlboro

more updates for pism name change to pix_ctl (PC)

Change 72720 on 2002/12/20 by vromaker@vromaker_r400_linux_marlboro

input arb fix for pix req while pix busy; renamed pism to pix_ctl and vism to vtx_ctl
and make new directories pc and vc

Change 72632 on 2002/12/19 by dougd@dougd_r400_linux_marlboro

fixed bug in loading texture constants when there are stalls in the data stream from
the rbbm

Change 72217 on 2002/12/18 by vromaker@vromaker_r400_linux_marlboro

fix for CFC read from ALU CFS 1

Change 71817 on 2002/12/17 by vromaker@vromaker_r400_linux_marlboro

Change 71495 on 2002/12/16 by vromaker@vromaker_r400_linux_marlboro

Change 71347 on 2002/12/16 by dougd@dougd_r400_linux_marlboro

Changes for synthesis: added a register stage to sq_const_map_cntl to improve timing;
changed direction of TST_SQ_rf_star_fb_out_fusebox in sq.v to output because fusebox is
internal to sq

Change 71059 on 2002/12/13 by vromaker@vromaker_r400_linux_marlboro

fix for SC packer optimization (quad ctl interface to SQ)

Change 70462 on 2002/12/11 by dougd@dougd_r400_linux_marlboro

made integer variable names unique for each process block

Change 70353 on 2002/12/11 by dougd@dougd_r400_linux_marlboro

default clause in case statement was 1st in list of cases - it must be last (or synopsys chokes)

Change 70341 on 2002/12/11 by vromaker@vromaker_r400_linux_marlboro

fix for lod_correct bit width change

Change 70330 on 2002/12/11 by dougd@dougd_r400_linux_marlboro

added 1 bit to the width of isr_loop_index_q to make it match it's connections

Change 70179 on 2002/12/10 by vromaker@vromaker_r400_linux_marlboro

update

Change 70178 on 2002/12/10 by vromaker@vromaker_r400_linux_marlboro

fix for consts; top level changes

Change 69908 on 2002/12/10 by dougd@dougd_r400_linux_marlboro

brought SQ_hs_<signals> to gc level and tied to logic low there

Change 69710 on 2002/12/09 by vromaker@vromaker_r400_linux_marlboro

more const waterfall fixes

Change 69670 on 2002/12/09 by vromaker@vromaker_r400_linux_marlboro

misc fixes for vcs compile

Change 69656 on 2002/12/09 by dougd@dougd_r400_linux_marlboro

add hs wrapper files

Change 69651 on 2002/12/09 by vromaker@vromaker_r400_linux_marlboro

constant waterfalling code added to AIQ, AIS, and AIO

Change 69125 on 2002/12/06 by dougd@dougd_r400_linux_marlboro

added hs memories and processors to perforce. added gc level connections to sq.v. ifdef in sq.v to enable hs behavorial memories for simulation.

Change 68379 on 2002/12/04 by dougd@dougd_r400_linux_marlboro

instantiated STAR hs processor, fuse_box and wiring

Change 68158 on 2002/12/03 by vromaker@vromaker_r400_linux_marlboro

fix for event_id to CP (4 to 5 bits); vism fix for continued & end of vector;
addition of ij buffer optimization for centers only/centroids only

Change 67902 on 2002/12/02 by vromaker@vromaker_r400_linux_marlboro

control flow updates; thread buff/status register clean-up

Change 67336 on 2002/11/27 by dougd@dougd_r400_linux_marlboro

fixed typo

Change 67331 on 2002/11/27 by dougd@dougd_r400_linux_marlboro

type in port name of unused input

Change 67098 on 2002/11/26 by vromaker@vromaker_r400_linux_marlboro

ctl flow update

Change 67077 on 2002/11/26 by vromaker@vromaker_r400_linux_marlboro

fixes for milestone_event bugs; functional changes to ctl flow

Change 66948 on 2002/11/26 by dougd@dougd_r400_linux_marlboro

initial submit of sq rf proc and fusebox

Change 66939 on 2002/11/26 by dougd@dougd_r400_linux_marlboro

STAR RF memories for synthesis and simulation: includes the rf proc and fuse_box in
sq.v and all of the necessary wiring

Change 66739 on 2002/11/25 by vromaker@vromaker_r400_linux_marlboro

fix for sq_busy

Change 66458 on 2002/11/23 by vromaker@vromaker_r400_linux_marlboro

fix for thread buffer read address wrapping

Change 66229 on 2002/11/22 by dougd@dougd_r400_linux_marlboro

added missing connections between sq_rbbm_interface and the constant store modules

Change 66186 on 2002/11/22 by vromaker@vromaker_r400_linux_marlboro

fix for predicate0_q

Change 66177 on 2002/11/22 by dougd@dougd_r400_linux_marlboro

fixed synopsys warning of cip_q[0] not being in the event list: changed it to cip_q

Change 66043 on 2002/11/21 by vromaker@vromaker_r400_linux_marlboro

fix for bug 818 (thread buffer head and tail ptr wrap problem)

Change 66017 on 2002/11/21 by dougd@dougd_r400_linux_marlboro

add the new Virage STAR rf memories (.v and .ctmc)

Change 65839 on 2002/11/21 by dougd@dougd_r400_linux_marlboro

fix bugs for synthesis. replaced dum_mem_p2 on Virage rf with Virage verilog models for simulation

Change 65700 on 2002/11/20 by vromaker@vromaker_r400_linux_marlboro

fix for bug 799 - a typo in the generation of pvps_disable was causing the problem

Change 65386 on 2002/11/19 by dougd@dougd_r400_linux_marlboro

fix minor coding error introduced in last version

Change 65321 on 2002/11/19 by dougd@dougd_r400_linux_marlboro

fixed a bug in new clock gating logic and changed the clock to the sq_phase_gen module from sclk_sq to sclk_const_mem to generate is_phase when the instruction_store is being loaded from the RBBM and sclk_sq has not yet been turned on. sq_vtx_thread had a port size mismatch on the read addr input

Change 65065 on 2002/11/18 by dougd@dougd_r400_linux_marlboro

added scan test bus. divided sq modules into 9 groups and generated a reset in the rbbm_interface for each group

Change 65064 on 2002/11/18 by dougd@dougd_r400_linux_marlboro

changed default value of parameters to prevent errors in synthesis

Change 65063 on 2002/11/18 by dougd@dougd_r400_linux_marlboro

correct coding errors in the instantiations of the virage memories

Change 64944 on 2002/11/18 by vromaker@vromaker_r400_linux_marlboro

fix for simple_loop

Change 64899 on 2002/11/18 by vromaker@vromaker_r400_linux_marlboro

misc bug fixes

Change 64341 on 2002/11/15 by dougd@dougd_r400_linux_marlboro

fixed bug in clk gater enable signal

Change 64304 on 2002/11/15 by dougd@dougd_r400_linux_marlboro

the ROM_SPx_disable_vtx inputs were not connected to sq_vism.v

Change 64138 on 2002/11/14 by vromaker@vromaker_r400_linux_marlboro

dot2add srcC.z swizzle = x

Change 64003 on 2002/11/14 by dougd@dougd_r400_linux_marlboro

allow the mapping tables to be copied only on the 1st draw command after a gfx_copy_state

Change 63931 on 2002/11/14 by dougd@dougd_r400_linux_marlboro

fixed bug in sq_rd_addr remapping

Change 63882 on 2002/11/13 by dougd@dougd_r400_linux_marlboro

fixed connection errors introduced by merge of files modified to add new Virage STAR memories

Change 63879 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memories and interconnections to them

Change 63878 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added connections for Virage STAR memory in vism_skid_buf

Change 63877 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memory

Change 63876 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

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added connections to Virage STAR memory in rbbm_skid_buf

Change 63875 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memory

Change 63874 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memory and interconnect

Change 63873 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memory

Change 63870 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memories and interconnect

Change 63869 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added Virage STAR memories and interconnect

Change 63865 on 2002/11/13 by desiree@desiree_r400_sun_marlboro

added STAR Virage memories

Change 63828 on 2002/11/13 by vromaker@vromaker_r400_linux_marlboro

fix for tri32_pix4 (pism was asserting RTR to ptr_buff incorrectly)

Change 63824 on 2002/11/13 by dougd@dougd_r400_linux_marlboro

added bad SP disable logic

Change 63821 on 2002/11/13 by dougd@dougd_r400_linux_marlboro

added rbbm diag read support and fixed RT operation

Change 63820 on 2002/11/13 by dougd@dougd_r400_linux_marlboro

numerous changes to add rbbm read diagnostic feature. Also: corrected the
map_copy_context in the const_map_cntl; made all non-constant store rbbm accesses
decode before going thru skid buffer.

Change 63494 on 2002/11/12 by vromaker@vromaker_r400_linux_marlboro

removed forcing of PS on _PREV opcodes
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Change 63373 on 2002/11/12 by vromaker@vromaker_r400_linux_marlboro

another fix for pspv_wr_en - alu_phase swapped for loading of pipeline registers

Change 63245 on 2002/11/11 by vromaker@vromaker_r400_linux_marlboro

delayed mask and predicate input to pspv_gpr_we by two cycles instead of delaying the
alu_phase mux select two cycles

Change 62913 on 2002/11/08 by vromaker@vromaker_r400_linux_marlboro

fix for valid bits (they were swapped in ais_output)

Change 62866 on 2002/11/08 by vromaker@vromaker_r400_linux_marlboro

fixed pspv_gpr write enables

Change 62309 on 2002/11/07 by vromaker@vromaker_r400_linux_marlboro

input arbitration fix - added pipelined pix_wr_busy to PISM

Change 61975 on 2002/11/06 by vromaker@vromaker_r400_linux_marlboro

updates for new gpr write enables

Change 61827 on 2002/11/05 by dougd@dougd_r400_linux_marlboro

make o_sp_vsr_read assert 1 tick earlier to correct a problem with changes in the SQ_SP
interface

Change 61651 on 2002/11/05 by vromaker@vromaker_r400_linux_marlboro

more predicate updates including pred_override, and delayed thread buffer
write back

Change 61285 on 2002/11/03 by vromaker@vromaker_r400_linux_marlboro

had to move vtx input grant out one cycle to get the VSR grp writes
       lined up with the correct phase

Change 60956 on 2002/11/01 by vromaker@vromaker_r400_linux_marlboro

- removed special case for scalar PREV opcodes
- removed old gpr write enable from SQ_SP interface

Change 60919 on 2002/11/01 by vromaker@vromaker_r400_linux_marlboro

predicate and SP write enable updates
```

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Change 60678 on 2002/10/31 by dougd@dougd_r400_linux_marlboro

remove wire declarations that use `defines for real time paramater registers

Change 60544 on 2002/10/30 by dougd@dougd_r400_linux_marlboro

remove _rt_param* regs to coincide with new emulator

Change 60095 on 2002/10/29 by vromaker@vromaker_r400_linux_marlboro

- added special case for scalar _PREV opcodes
- started predicate updates

Change 59942 on 2002/10/29 by dougd@dougd_r400_linux_marlboro

added "`ifdef" for virage memories

Change 59546 on 2002/10/26 by dougd@dougd_r400_linux_marlboro

added clock gaters and flops for resets

Change 59428 on 2002/10/25 by vromaker@vromaker_r400_linux_marlboro

updates

Change 59279 on 2002/10/25 by vromaker@vromaker_r400_linux_marlboro

minor updates

Change 59186 on 2002/10/24 by dougd@dougd_r400_linux_marlboro

many changes to support RBBM diagnostic read access to the constant memories in
aluconst and texconst

Change 59171 on 2002/10/24 by vromaker@vromaker_r400_linux_marlboro

delayed const to SP by one cycle

Change 59080 on 2002/10/24 by vromaker@vromaker_r400_linux_marlboro

- big update for pv/ps detection (it was moved from in front of the
         AIQ to after the AIQ)
       - constants fixed to properly add base and index (no waterfalling yet)
       - constants fixed to properly map src A,B,C onto c0 and c1
       - ALU instr queue uses new reg storage (also, controller was renamed)

Change 58116 on 2002/10/18 by vromaker@vromaker_r400_linux_marlboro
```

```
new Instr Queue files

Change 57672 on 2002/10/17 by vromaker@vromaker_r400_linux_marlboro

minor fixes related to CFS state mem expansion

Change 57639 on 2002/10/17 by vromaker@vromaker_r400_linux_marlboro

- more control flow updates
- output rotated requests from vtx thread buffer

Change 57520 on 2002/10/16 by dougd@dougd_r400_linux_marlboro

add 1 bit to size of vsim_event_id

Change 57405 on 2002/10/16 by dougd@dougd_r400_linux_marlboro

fix bug introduced in the previous version that caused o_new_context_ld to go to "X"
just after reset

Change 57379 on 2002/10/16 by dougd@dougd_r400_linux_marlboro

fixed bug in decoding GFX_COPY_STATE

Change 57210 on 2002/10/15 by vromaker@vromaker_r400_linux_marlboro

CFS: added control flow instructions

Change 56923 on 2002/10/14 by dougd@dougd_r400_linux_marlboro

added barrel shifter and arbitration winner translation logic needed to remove shifting
function of sq_status_reg

Change 56824 on 2002/10/13 by dougd@dougd_r400_linux_marlboro

increase size of pix thread buffer from 16 to 48: fixed bugs in the arbitration winner
address translation

Change 56409 on 2002/10/10 by vromaker@vromaker_r400_linux_marlboro

update to cond exec

Change 56155 on 2002/10/09 by vromaker@vromaker_r400_linux_marlboro

updates for conditional execution

Change 56142 on 2002/10/09 by vromaker@vromaker_r400_linux_marlboro
```

- fix for tp_done/ais_pop collision
- added conditional execution to CFS

Change 55772 on 2002/10/08 by dougd@dougd_r400_linux_marlboro

changed sq_cfc to have three sets of read ports controlled by i_is_sub_phase

Change 55732 on 2002/10/07 by dougd@dougd_r400_linux_marlboro

modified port list of instantiations of sq_status_register to match latest version of
that module.

Change 55670 on 2002/10/07 by dougd@dougd_r400_linux_marlboro

increased number of status registers from 16 to 48

Change 55666 on 2002/10/07 by dougd@dougd_r400_linux_marlboro

changed output name of alu(tex)_req_q to alu(tex)_req_out_q on sq_pix_thread_buff

Change 55620 on 2002/10/07 by vromaker@vromaker_r400_linux_marlboro

- fixes to param cache write ptr, and param cache free counter

Change 55389 on 2002/10/04 by vromaker@vromaker_r400_linux_marlboro

param cache write and dealloc update

Change 55202 on 2002/10/03 by dougd@dougd_r400_linux_marlboro

fixes bug reported in Bugzilla: Bug 405 where wrong data was written to
sq_instruction_store memory due to interruption or pause of write data on rbbm bus

Change 55025 on 2002/10/03 by dougd@dougd_r400_linux_marlboro

add FIFO_NAME to skid buffer ati_fifo_cntl in rbbm and vism

Change 55017 on 2002/10/03 by dougd@dougd_r400_linux_marlboro

added "FIFO_NAME" to skid buffer ati_fifo_cntl in rbbm and vism

Change 54932 on 2002/10/02 by vromaker@vromaker_r400_linux_marlboro

pism updated for case when param_gen and gen_index detected

Change 54925 on 2002/10/02 by dougd@dougd_r400_linux_marlboro

```
added the following rbbm register outputs from rbbm_interface:
context_misc_sc_output_screen_xy_set, context_misc_sc_sample_cntl_set,
gen_index_pix_set and gen_index_vtx_set

Change 54872 on 2002/10/02 by vromaker@vromaker_r400_linux_marlboro

- double buffer for dealloc space added to exit SM so it can handle
         a second dealloc request while the first one is still in progress

Change 54688 on 2002/10/01 by vromaker@vromaker_r400_linux_marlboro

event_vld was collideing with cfs_update : fixed

Change 54647 on 2002/10/01 by vromaker@vromaker_r400_linux_marlboro

- exp_cnt_q (export count) added to sq_export_alloc
- pulse_sx update
- pc_we fixed (export_pc fixed - added thread_type into logic)

Change 54498 on 2002/10/01 by dougd@dougd_r400_linux_marlboro

changed the REN input on the single port use of dum_mem_p2 from 1'b1 to ~wen to prevent
the warning messages displayed during simulation
```