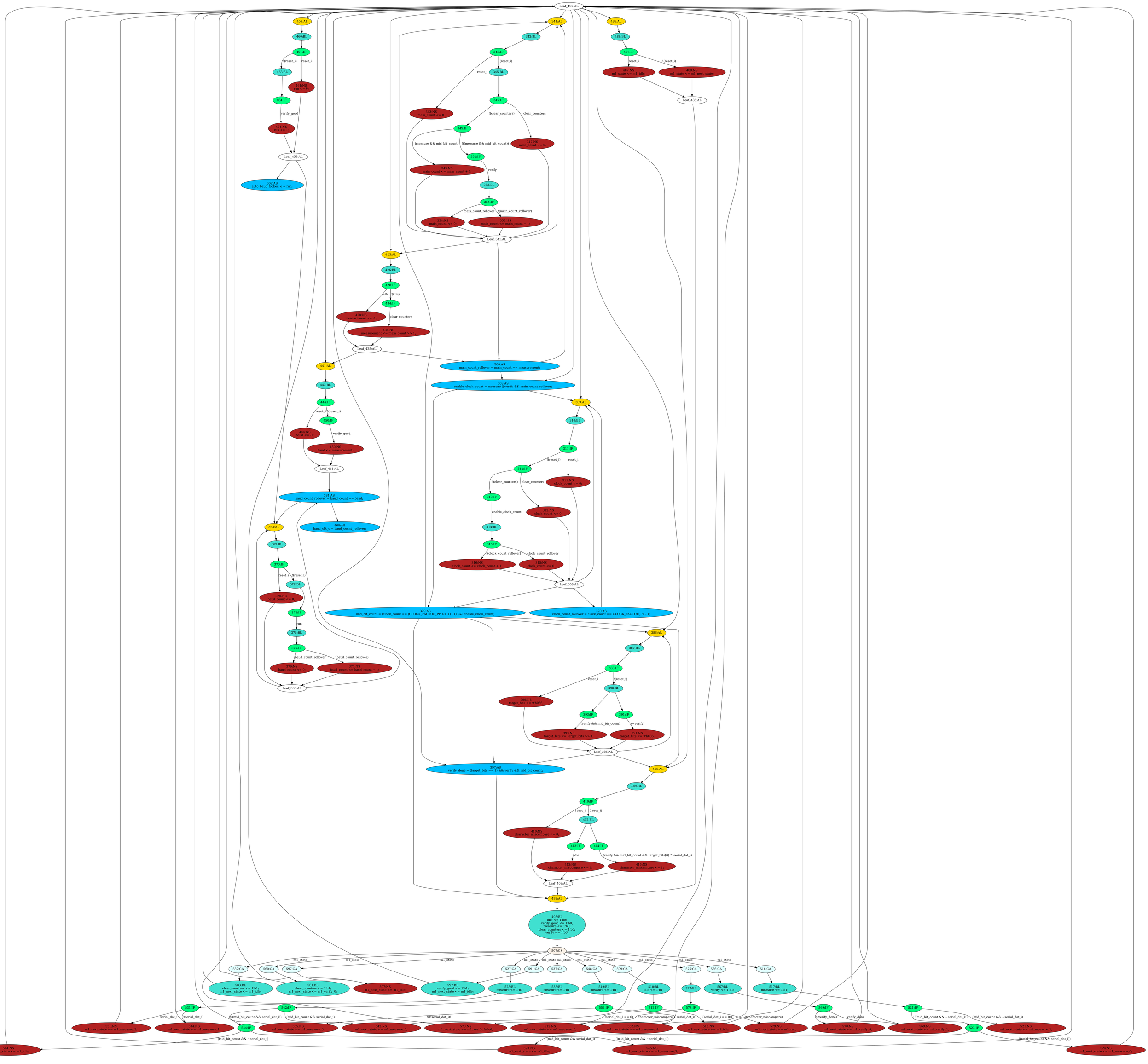
Leaf_492:AL
459:AL
460:BL
461:IF
!(reset_i)
reset_i
463:BL
461:NS
run <= 0;
464:IF
verify_good
464:NS
run <= 1;
Leaf_459:AL
602:AS
auto_baud_locked_o = run;
441:AL
442:BL
444:IF
reset_i
!(reset_i)
450:IF
verify_good
444:NS
baud <= -1;
450:NS
baud <= measurement;
Leaf_441:AL
381:AS
baud_count_rollover = baud_count == baud;
466:AS
baud_clk_o = baud_count_rollover;
368:AL
369:BL
370:IF
reset_i
!(reset_i)
372:BL
370:NS
baud_count <= 0;
374:IF
run
375:BL
376:IF
baud_count_rollover
!(baud_count_rollover)
376:NS
baud_count <= 0;
377:NS
baud_count <= baud_count + 1;
Leaf_368:AL
341:AL
342:BL
343:IF
!(reset_i)
reset_i
345:BL
343:NS
main_count <= 0;
347:IF
!(clear_counters)
clear_counters
349:IF
(measure && mid_bit_count)
!((measure && mid_bit_count))
347:NS
main_count <= 0;
352:IF
349:NS
main_count <= main_count + 1;
verify
353:BL
354:IF
main_count_rollover
!(main_count_rollover)
354:NS
main_count <= 0;
355:NS
main_count <= main_count + 1;
Leaf_341:AL
425:AL
426:BL
428:IF
idle
!(idle)
434:IF
428:NS
measurement <= -1;
clear_counters
434:NS
measurement <= main_count >> 1;
Leaf_425:AL
360:AS
main_count_rollover = main_count == measurement;
308:AS
enable_clock_count = measure || verify && main_count_rollover;
309:AL
310:BL
311:IF
!(reset_i)
reset_i
312:IF
!(clear_counters)
clear_counters
311:NS
clock_count <= 0;
313:IF
enable_clock_count
312:NS
clock_count <= 0;
314:BL
315:IF
!(clock_count_rollover)
clock_count_rollover
316:NS
clock_count <= clock_count + 1;
315:NS
clock_count <= 0;
Leaf_309:AL
329:AS
mid_bit_count = (clock_count == (CLOCK_FACTOR_PP >> 1) - 1) && enable_clock_count;
320:AS
clock_count_rollover = clock_count == CLOCK_FACTOR_PP - 1;
386:AL
387:BL
388:IF
reset_i
!(reset_i)
390:BL
398:NS
target_bits <= 9'h086;
393:IF
391:IF
(verify && mid_bit_count)
(~verify)
393:NS
target_bits <= target_bits >> 1;
391:NS
target_bits <= 9'h086;
Leaf_386:AL
397:AS
verify_done = (target_bits == 1) && verify && mid_bit_count;
408:AL
409:BL
410:IF
reset_i
!(reset_i)
412:BL
410:NS
character_miscompare <= 0;
413:IF
414:IF
idle
(verify && mid_bit_count && target_bits[0] ^ serial_dat_i)
413:NS
character_miscompare <= 0;
415:NS
character_miscompare <= 1;
Leaf_408:AL
492:AL
498:BL
idle <= 1'b0;
verify_good <= 1'b0;
measure <= 1'b0;
clear_counters <= 1'b0;
verify <= 1'b0;
507:CS
m1_state
582:CA
583:BL
clear_counters <= 1'b1;
m1_next_state <= m1_idle;
560:CA
561:BL
clear_counters <= 1'b1;
m1_next_state <= m1_verify_0;
597:CA
597:NS
m1_next_state <= m1_idle;
527:CA
592:BL
verify_good <= 1'b1;
m1_next_state <= m1_idle;
591:CA
528:BL
measure <= 1'b1;
537:CA
538:BL
measure <= 1'b1;
548:CA
549:BL
measure <= 1'b1;
509:CA
510:BL
idle <= 1'b1;
576:CA
577:BL
566:CA
567:BL
verify <= 1'b1;
516:CA
517:BL
measure <= 1'b1;
531:IF
serial_dat_i
!(serial_dat_i)
531:NS
m1_next_state <= m1_measure_2;
534:NS
m1_next_state <= m1_measure_1;
542:IF
((mid_bit_count && serial_dat_i))
(mid_bit_count && serial_dat_i)
555:NS
m1_next_state <= m1_measure_3;
542:NS
m1_next_state <= m1_measure_3;
578:NS
m1_next_state <= m1_verify_failed;
552:IF
!((serial_dat_i))
(serial_dat_i == 0)
512:NS
m1_next_state <= m1_measure_0;
512:IF
character_miscompare
!(serial_dat_i)
552:NS
m1_next_state <= m1_measure_4;
578:IF
((serial_dat_i == 0))
!(character_miscompare)
513:NS
m1_next_state <= m1_idle;
578:NS
m1_next_state <= m1_run;
569:IF
{verify_done}
verify_done
570:NS
m1_next_state <= m1_verify_0;
521:IF
((mid_bit_count && ~serial_dat_i))
(mid_bit_count && ~serial_dat_i)
569:NS
m1_next_state <= m1_verify_1;
523:IF
521:NS
m1_next_state <= m1_measure_1;
544:NS
m1_next_state <= m1_idle;
(mid_bit_count && ~serial_dat_i)
523:NS
m1_next_state <= m1_idle;
!((mid_bit_count && ~serial_dat_i))
545:NS
m1_next_state <= m1_measure_2;
!((mid_bit_count && serial_dat_i))
524:NS
m1_next_state <= m1_measure_0;
485:AL
486:BL
487:IF
reset_i
!(reset_i)
487:NS
m1_state <= m1_idle;
488:NS
m1_state <= m1_next_state;
Leaf_485:AL