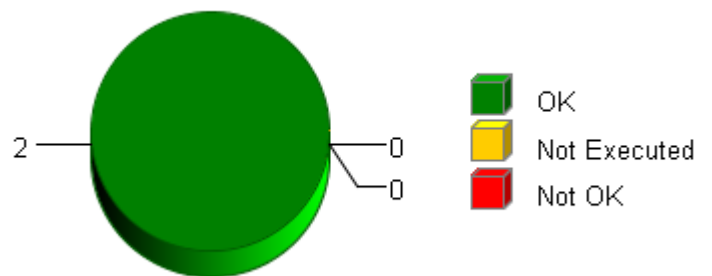


Summary

Total Test Objects: 2
Successful: 2
Failed: 0
Not Executed: 0
Date: 2015-12-21
Time: 17:46:11+0530

Overall Test Object Results (including Coverage)



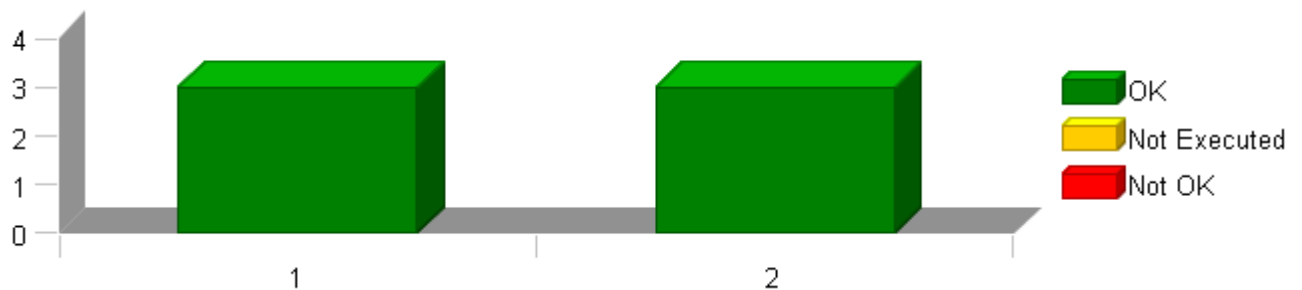
Selected Project Items

Test Object "CBD_UnitTest/DiagMgr_FailAction/DiagMgr_Per1"
Test Object "CBD_UnitTest/DiagMgr_FailAction/ReadBit_u16"

Used Test Environments

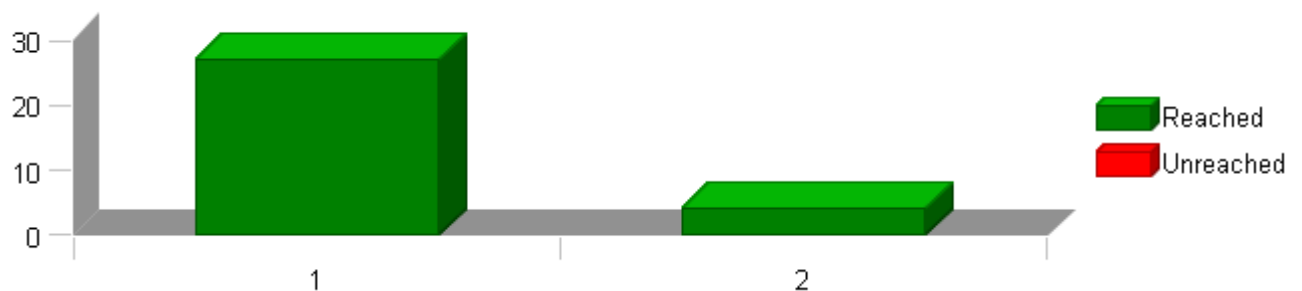
TI TMS 570 PLS UDE (Default)

Test Case Results for Each Test Object (without Coverage)



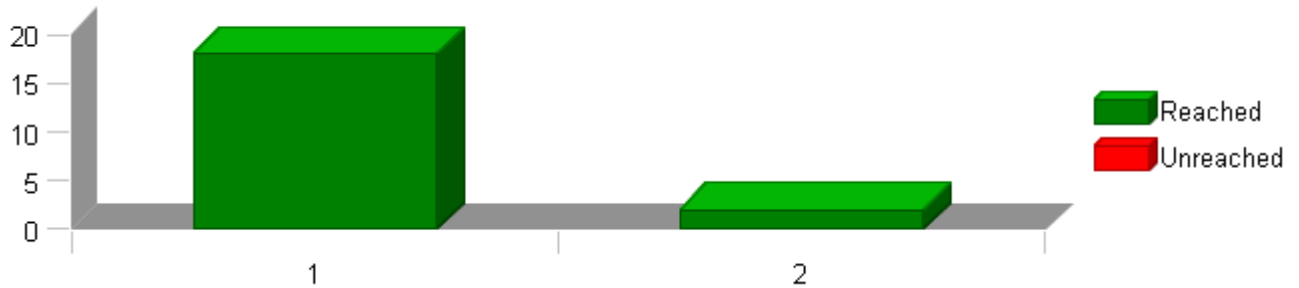
The table above shows each test object on the x axis and the number of test cases of the respective test object on the y axis. Each bar is divided into passed, not executed and failed test cases. The test case results do not take into account any coverage result (i.e. if all test cases of a test object are passed in this table but the coverage is failed, the overall test object result will be failed).

Statement (C0) Coverage: Total Statements for Each Test Object



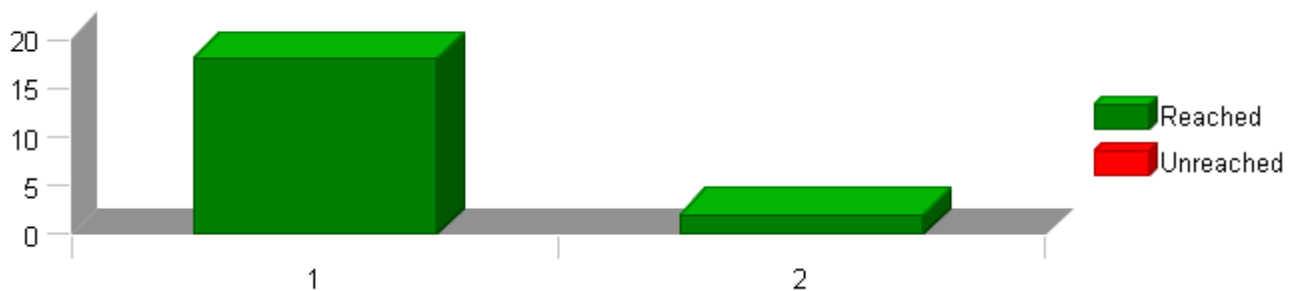
The table above shows each test object on the x axis and the number of statements of the respective test object on the y axis. Each bar is divided into reached statements (i.e. statements that have been executed during the test) and unreached statements.

Branch (C1) Coverage: Total Branches for Each Test Object



The table above shows each test object on the x axis and the number of branches of the respective test object on the y axis. Each bar is divided into reached branches (i.e. branches that have been executed during the test) and unreached branches.

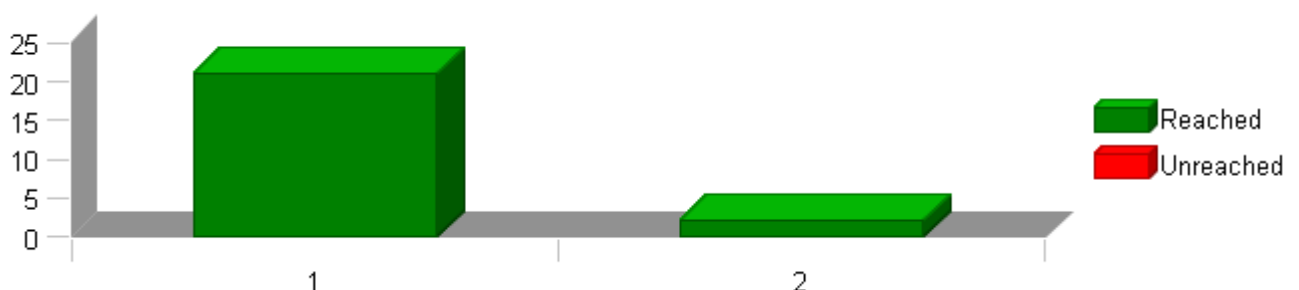
Decision Coverage: Total Decision Outcomes for Each Test Object



The table above shows test objects on the x axis and the number of possible outcomes of all decisions of the respective test object on the y axis. To achieve full DC coverage, each decision must evaluate to both true and false.

Each bar is divided into reached and unreached decision outcomes.

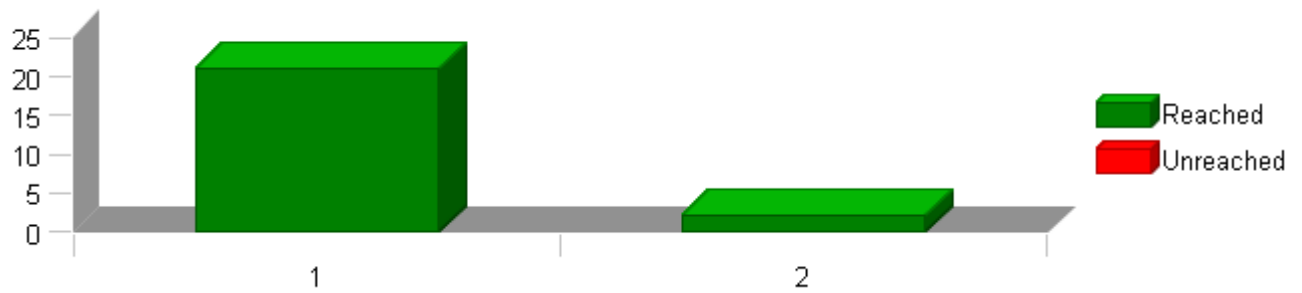
MC/DC Coverage: Total Condition Combinations for Each Test Object



The table above shows test objects on the x axis and the number of condition combinations of all decisions of the respective test object on the y axis. The number of condition combinations is based on the number of boolean conditions within each decision of the test object. To achieve full MC/DC coverage, each decision requires all contained atomic conditions to evaluate to both true and false independently of all other conditions. The cumulated number of rows within such tables of condition combinations is what is displayed in this table.

Each bar is divided into reached condition combinations (i.e. combinations of boolean condition values that have been executed during the test) and unreached condition combinations.

MCC Coverage: Total Condition Combinations for Each Test Object



The table above shows test objects on the x axis and the number of condition combinations of all decisions of the respective test object on the y axis. The number of condition combinations is based on the number of boolean conditions within each decision of the test object. To achieve full MCC coverage, each decision requires all contained atomic conditions to evaluate to all possible combinations of true and false values. The cumulated number of rows within such tables of condition combinations is what is displayed in this table.

Each bar is divided into reached condition combinations (i.e. combinations of boolean condition values that have been executed during the test) and unreached condition combinations.

Test Object List

The following table lists all test objects with their test case and coverage results. The cumulated results for modules, folders and test collections are also displayed, the indentation within the name column indicates the parent relationship of the elements.

Please note that only test objects are numbered within the first column. This number is referenced on the x axis within the overview charts for test case and coverage results available on previous pages (if included into the report).

No.	Name	C0	C1	DC	MC/DC	MCC	Test Cases	Result
	DiagMgr_failaction	100 %	100 %	100 %	100 %	100 %	6 of 6 passed	✓
	CBD_UnitTest	100 %	100 %	100 %	100 %	100 %	6 of 6 passed	✓
	DiagMgr_FailAction	100 %	100 %	100 %	100 %	100 %	6 of 6 passed	✓
1	DiagMgr_Per1	100 %	100 %	100 %	100 %	100 %	3 of 3 passed	✓
2	ReadBit_u16	100 %	100 %	100 %	100 %	100 %	3 of 3 passed	✓

3URMHFW	'LDJ0JUBIDLODFWLRQ
0RGXOH	'LDJ0JUB)DLO\$FWLRQ
7HVW 2EMHFW	'LDJ0JUB3HU

,QVWUXPHQWDWLRQ 7HVW 2EMHFW 2QO\

6WDWHPHQW & &R
'HFLVLRQ &RYUDJH
%UDQFK & &RYUD
0&& &RYUDJH
0& '& &RYUDJH

6WDWLVLWLFV

7RWDO 7HVWFDVHV	
6XFFHVVIXO	✓
)DLOHG	
1RW ([HFXWHG	

0RGXOH 3URSHUWLHV

3URMHFW 5RRW 'LUH	' ?6\QHUI\B:RUNB\$UHD?'LDJ0JUB)DLODFWLRQ
&RQILJXUDWLRQ)LOH	' ?6\QHUI\B:RUNB\$UHD?'LDJ0JUB)DLODFWLRQ?8QLW7HVW(QY?
7DUJHW (QYLURPHQ	7, 706 3/6 8(' 'HIDXOW
.LQG RI 7HVW	8QLW 7HVW
/LQNHU 2SWLRQV	
6RXUFH)LOH V	
)LOH	352-(&75227 ?'LDJ0JU?VUF?\$SB'LDJ0JUB)DLO\$FWLRQ F
&RPSLOHU 2SWLF	'B'\$7\$B\$&&(66 'FRQVW 'VWDWLF '6..3B0\$*,&B180%(5 , 352-(&75227 ?1[WU/LE? ?LQFOXGH2-(&75227 ?'LDJ0JU?XWS?FRQWUDFW , 352-(&75227 ?'LDJ0JU?XWS?FRQW ?LQFOXGH2RJUDP)LOHV ?7HIDV ,QVWUXPHQWV?FFVY ?WRROV?FRPSLOHU?WPV B

&RPPHQWV 'HVFULSWLRQ 6SHFLILFDWLRQ

1DPH	7H[W
0RGXOH 'LDJ0JUB)DLO\$FWLRQ	8QLW 7HVW 'HVFULSWLRQ
	1DPH RI 7HVWFDVHV 0RUEDOH &RGH)LOH V '66HLD7HVW)DLO\$FWLRQ F &RGH)LOH V 9HUVLRQ 0RGXOH 'HVLJQ 'LDJ0JUB)DLO\$FWLRQ FVB0DQDJHUB)DLO\$FWLRQB0" GRF[0RGXOH 'HVLJQ 'RFXPHQW 9HUVLRQ 'DWD 'LFWLRQDU\ 9HUVLRQ 8QLW 7HVW 3ODQ 9HUVLRQ 2SWLPL]DWLRQOHYHO &RPSLOHU &RGH'706 9HUVLRQ 0RGHO 7HVW 0DFUR 0RGHO 9HUVLRQ (36 8QLW 7HVW 7RRO G (36 /LEUDU\ 7RWDO)/\$6+ 8VHG %\WHV 7RWDO 5\$0 8VHG %\WHV 7RWDO &\$/6 8VHG %\WHV 6SHFLDO 7HVW 5HTXLUPHQWV 7HVW 'DWH &RPPHQWVH ,QOLQH)XQFWLRQ GHILQH LQ *ORED00DFUR K LV QRW XQLW WHVWH 127(&% 'B6DQGER[BGEJ PDS PDS ILOH LV HPEHGGHG IRU UHIHUHQFH 127(&RQVWDQW 'B122)\$&7,9(.19(57(5B&17B8 LV FRQILJXUDEOH YDULDEOH DQG ZK GHFODUHQ YDULDEOH DV FRQVWDQW LW LV GHFODUHG DV YDULDEOH IRU WHVWLQJ

\$WWULEXWHV

1DPH	9DOXH
Compiler Install Path	\$(ProgramFiles)\Texas Instruments\ccsv4\tools\compiler\tms470_4.9.5
Float Precision	9
InitObjDir	\$(PROJECTROOT)\UnitTestEnv\static_build_files\obj
InitSrcDir	\$(PROJECTROOT)\UnitTestEnv\static_build_files\src
Linker File	\$(PROJECTROOT)\UnitTestEnv\static_build_files\sys_link.cmd
Makefile Template	\$(PROJECTROOT)\UnitTestEnv\config\Nexteer_ts_make_ude_ti_tms570_ps.tpl
Target Install Path	\$(ProgramFiles)\plsUDE 3.2
Timer Enabled	false

\$WWULEXWHV	
1DPH	9DOXH
Timer Prescale	0
Timer Resolution	1
Timer Unit	Cycles
UDE Config File	\$(PROJECTROOT)\UnitTestEnv\config\TMS570_UDE_12PIN_JTAG.cfg
Workspace File	D:\Synergy_Work_Area\DiagMgr_Failaction\UnitTestEnv\config\UDE_TMS570_DEBUG.WSP


```

76 6KRUWHVW ([HFXLWRQ 3DWK L X 758( )$/6( 7B'LDJ0JU5PS5DWHB3WUBI >L@ :
    'LDJ0JU5PS5DWHB8QVSP6B7BI ! $$$5PS5DWHB8QVSP6B7BI )$/6(
    'LDJ6WVJ1RQ5HF5PS7R=HUR)OW3UHV758QWB7BOJF5PS7R=HUR)OW3UHV758QWB7BO
    'B122)$&7.9,(19(57(5B&17B88 758( 'LDJ6WV,QYHUWUHU ,QDFWLYHB&QWB7BOJF )$/6(
    'LDJ6WV,QYHUWUHU ,QDFWLYHB&QWB7BOJF )$/6( 758(
76 /RQJHJV ([HFXLWRQ 3DWK 'LDJ6WV,QYHUWUHU ,QDFWLYHB&QWB7BOJF )$/6( )$/6(
    'LDJ6WV,QYHUWUHU ,QDFWLYHB&QWB7BOJF )$/6( 758(
    'LDJ6WV,QYHUWUHU ,QDFWLYHB&QWB7BOJF )$/6( 758( )$

```


1DPH	,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8			
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS		
WJWB > @			
WJWB > @			
WJWB > @			
WJWB > @			
WJWBUPS > @			
WJWBUPS > @			
WJWBUPS > @			
WJWBUPS > @			
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QW			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6(VWP)OW3UHV&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=H			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOI			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,.5'LVDEOHB&QWBOJF	GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF	GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBC			✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVW &DVH %RXQGDU\ 7HVW ✓

6SHFLILFD W&B Performance Metrics (With "None" Instrumentation and WithPS Environment)
CPU Cycles:

TS2.1 7675.00 Cycles
TS2.2 7612.00 Cycles
TS2.3 7582.00 Cycles
TS2.4 7601.00 Cycles
TS2.5 7567.00 Cycles
TS2.6 7550.00 Cycles
TS2.7 7578.00 Cycles
TS2.8 7556.00 Cycles
TS2.9 7617.00 Cycles
TS2.10 7578.00 Cycles
TS2.11 7578.00 Cycles
TS2.12 7625.00 Cycles
TS2.13 7647.00 Cycles
TS2.14 7556.00 Cycles

'HVFULSWLRQ'QFWRU 'HVFULSWLRQ

76 'LDJ6WV B&QWB0BE PLQ
76 'LDJ6WV B&QWB0BE PD[
76 'LDJ6WV B&QWB0BE SRV
76 'LDJ6WV B&QWB0BE PLQ
76 'LDJ6WV B&QWB0BE PD[
76 'LDJ6WV B&QWB0BE SRV
76 \$FWLYH5PS5DWH B8OVSP6B0BI PLQ
76 \$FWLYH5PS5DWH B8OVSP6B0BI PD[
76 \$FWLYH5PS5DWH B8OVSP6B0BI SRV
76 \$FWLYH5PS5DWH B8OVSP6B0BI PLQ
76 \$FWLYH5PS5DWH B8OVSP6B0BI PD[
76 \$FWLYH5PS5DWH B8OVSP6B0BI SRV
76 \$OO 0LQ
76 \$OO 0D[

7HVW 6WHS 5HSHDW &RXQW		✓
1DPH		,QSXW 9DOXH
'B122)\$&7,9(,19(57(5B&17B8		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS
WJWB > @		
WJWB > @		
WJWB > @		
WJWB > @		
WJWBUPS > @		
WJWBUPS > @		
WJWBUPS > @		

1DPH	,QSWX 9DOXH		
WJWBUPS > @			
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3	UHV&QWBOJF	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=H			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3	UHV&QWBOJF	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'LVDEOH&QWBOJF	GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF	GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF			✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(	5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDG%LWBX	FKHG	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDG%LWBX	FKHG	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3U		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3U		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3U		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3U		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3U		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3U		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'LVDEOH&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'LVDEOH&QWBOJF		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX		5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX		✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDG%LWBX		5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDG%LWBX		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB			
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB			
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS			
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS			
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWBOJF	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3	UHV&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=H				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3	UHV&QWBOJF	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓

1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOHB&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBC			✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX	([SHFWHG)XQFWLRQ	&RX	(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK		5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWBOJF		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOHB&QWBOJF		5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOHB&QWBOJF		✓
5HDG%LWBX		5HDG%LWBX		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH		5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX		5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX		✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK		5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG		✓

7HVV 6WHS	5HSHDW &RXQW			✓
1DPH				
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWBOJF GDWD				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWBOJF GDWD				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF GDWD				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF GDWD				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	OW3UHVB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	OW3UHVB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	OW3UHVB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	OW3UHVB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOHB&QWBOJF GDWD				✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBC				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWXW 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOHB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWXW 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @		H		
WJWBUPS > @		H		
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOHB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @		H		
WJWBUPS > @		H		
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D)OW3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWXW 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @		H		
WJWBUPS > @		H		
WJWBUPS > @		H		
WJWBUPS > @		H		
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD H	H		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWB	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB	GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	OV3UHVB&QWB	GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB	GDWD			✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	GDWD			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOHB&QWB		OV3UHVB&QWB	GDWD	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV &DVH 3DWK 7HVV

6SHFLILFD W Performance Metrics (With "None" Instrumentation
and WithPS Environment)
CPU Cycles:

TS3.1 7675.00 Cycles
TS3.2 7649.00 Cycles
TS3.3 7611.00 Cycles
TS3.4 7651.00 Cycles
TS3.5 7549.00 Cycles
TS3.6 7533.00 Cycles

'HVFULSWLRQ DQFWRU 'HVFULSWLRQ

76 LI 758('LDJ6WV1RQ5HF5PS7R=HUR)OW3UHVB&QWB7BOJF __ 758('LDJ6WV5
758(
76 LI 758('LDJ6WV1RQ5HF5PS7R=HUR)OW3UHVB&QWB7BOJF __ 758('LDJ6WV5
)\$/6(
76 758('LDJ6WV1RQ5HF5PS7R=HUR)OW3UHVB&QWB7BOJF)\$/6(
DQG 758('LDJ6WV5HF5PS7R=HUR)OW3UHVB&QWB7BOJF !758(
76 'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB7BOJF)\$/6(758('LDJ6WV,QYHUWHU ,QDF
'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB7BOJF 758()\$/6(
'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB7BOJF)\$/6(758(
76 758('LDJ6WV1RQ5HF5PS7R=HUR)OW3UHVB&QWB7BOJF __ 758('LDJ6WV5HF5
'B122)\$&7,9(,19(57(5B&17B8 8)DOVH
'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB7BOJF 758()DOVH
76 758('LDJ6WV1RQ5HF5PS7R=HUR)OW3UHVB&QWB7BOJF __ 758('LDJ6WV5HF5
'B122)\$&7,9(,19(57(5B&17B8 8)DOVH
'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB7BOJF 758(7UXH

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSW 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH		([SHFWHG 9DOXH 5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB7BOJF		GDWD		✓

1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB			✓

7HVV 6WHS &DOO 7UDFH			
\$FWXDO)XQFWLRQ	&RX(([SHFWHG)XQFWLRQ	&RX(5HV)	
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV&QWBOJF GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV&QWBOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH&QWBOJF GDWD	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH&QWBOJF GDWD		✓
5HDG%LWBX	5HDG%LWBX		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX		✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFKHG		✓

7HVV 6WHS 5HSHDW &RXQW			
1DPH	,QSW 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8			
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @	WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @	WJWBUPS		
WJWB > @			
WJWB > @			
WJWB > @			
WJWB > @			
WJWBUPS > @	H		
WJWBUPS > @	H		
WJWBUPS > @	H		
WJWBUPS > @	H		
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	GDWD H	H	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVBI			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3U			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV&QWBOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DOJF GDWD			✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF GDWD			✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB			✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBO	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBO	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBO	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBO	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYHB&QWBOJF		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHV				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWBOJF		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE&QW				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\VWF)OW3UHV		B&QWBOJF	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR)OW3UHV		B&QWBOJF	GDWD	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,'5'LVDEOH&QWBOJF		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBOJF		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWBO				✓

7HVV 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV)
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&Q	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓

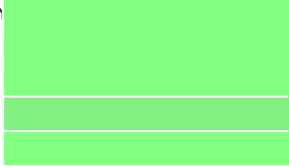
7HVV 6WHS 5HSHDW &RXQW				✓
1DPH		,QSWX 9DOXH		
'B122)\$&7,9(,19(57(5B&17B8				
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU'LDJ6WVB3WUBE > @		WJWB		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
7B'LDJ0JU5PS5DWHB3WUBI > @		WJWBUPS		
WJWB > @				
WJWB > @				
WJWB > @				
WJWB > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
WJWBUPS > @				
1DPH		\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP6BI		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXH8OVBI				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FWLYH&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UHVB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGB&QWB				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP)OV3UHVB&QWB		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=HUR		GDWD		✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9DO				✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:',5'LVDEOHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWBX				✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB		GDWD		✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB				✓

7HVV 6WHS &DOO 7UDFH					✓
\$FWXDO)XQFWLRQ		&RX(([SHFWHG)XQFWLRQ		&RX(5HV>	
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5HDFK	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV1RQ5HF5PS7R=HUR	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV&WUOG'LV5PS3UH	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV5HF5PS7R=	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV+:\$6E6\WVP	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI9HK6SGE	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV'HI7HPSB&C	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV6FRP+:\$1RW9D	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH	5WHB:ULWHB\$SB'LDJ0JUB'LDJ6WV:,5'LVDEOH	✓
5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	5HDG%LWBX	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&	✓
5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	5WHB:ULWHB'LDJ6WV,QYHUWHU ,QDFWLYHB&QWB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS5DWHB;SP	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVB	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5DPS9DOXHB8OVB	✓
5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	5WHB:ULWHB\$SB'LDJ0JUB'LDJ5PS7R=HUR\$FW	✓
5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWB	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWB	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWB	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWB	5WHB:ULWHB'LDJ1RRI\$FWLYH,QYHUWHUB&QWB	✓
5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5H	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5H	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5H	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5H	5WHB&DOOB'LDJ0JUB3HU B&3 B&KHFNSRLQW5H	✓

3URMHFW	'LDJ0JUBIDLODFWLRQ
0RGXOH	'LDJ0JUB)DLO\$FWLRQ
7HVW 2EMHFW	5HDG%LWBX

,QVWUXPHQWDWLRQ 7HVW 2EMHFW 2QO\

6WDWHPHQW & &R\
'HFLVLRQ &RYHUDJH
%UDQFK & &RYHUD
0&& &RYHUDJH
0& '& &RYHUDJH



6WDWLVLWLFV

7RWDO 7HVWFDVHV	
6XFFHVVIXO	✓
)DLOHG	
1RW ([HFXWHG	

0RGXOH 3URSHUWLHV

3URMHFW 5RRW 'LUH	' ?6\QHUJ\B:RUNB\$UHD?'LDJ0JUB)DLODFWLRQ
&RQILJXUDWLRQ)LOH	' ?6\QHUJ\B:RUNB\$UHD?'LDJ0JUB)DLODFWLRQ?8QLW7HVW(QY?I
7DUJHW (QYLURQPHQ	7, 706 3/6 8(' 'HIDXOW
.LQG RI 7HVW	8QLW 7HVW
/LQNHU 2SWLRQV	
6RXUFH)LOH V	
)LOH	352-(&75227 ?'LDJ0JU?VUF?\$SB'LDJ0JUB)DLO\$FWLRQ F
&RPSLOHU 2SWLF	'B'\$7\$B\$&&(66 'FRQVW 'VWDWL' '6..3B0\$*,&B180%(5 , 352-(&75227 ?1[WU/LE? ?LQFOXGH2-(&75227 ?'LDJ0JU?XWS?FRQWUDFW , 352-(&75227 ?'LDJ0JU?XWS?FRQW ?LQFOXGH2RJUDP)LOHV ?7HIDV ,QVWUXPHQWV?FFVY ?WRROV?FRPSLOHU?WPV B

&RPPHQWV 'HVFULSWLRQ 6SHFLILFDWLRQ

1DPH	7H[W
0RGXOH 'LDJ0JUB)DLO\$FWLRQ	8QLW 7HVW 'HVFULSWLRQ
	1DPH RI 7HVWFDVHV 0RUEDOH &RGH)LOH V 6SHFLILFDWLRQ)DLO\$FWLRQ F &RGH)LOH V 9HUVLRQ 0RGXOH 'HVLJQ 'LDJ0JUB)DLO\$FWLRQ FVB0DQDJHUB)DLO\$FWLRQB0" GRF[0RGXOH 'HVLJQ 'RFXPHQW 9HUVLRQ 'DWD 'LFWLRQDU\ 9HUVLRQ 8QLW 7HVW 3ODQ 9HUVLRQ 2SWLPL]DWLRQ 9HUVLRQ &RPSLOHU &RGH 706 9HUVLRQ 0RGHO 7HVWFDVHV 0DFUR 0RGHO 9HUVLRQ (36 8QLW 7HVW 7RRO G (36 /LEUDU\ 7RWDO)/\$6+ 8VHG %\WHV 7RWDO 5\$0 8VHG %\WHV 7RWDO &\$/6 8VHG %\WHV 6SHFLDO 7HVW 5HTXLUPHQW 7HVW 'DWH &RPPHQWV 'HVLJQ 'RFXPHQW 9HUVLRQ 127(&% 'B6DQGER[BGEJ PDS PDS ILOH LV HPEHGGHG IRU UHIHUHQFH 127(&RQVWDQW 'B122)\$&7,9(.19(57(5B&17B8 LV FRQILJXUDEOH YDULDEOH DQG ZK GHFODUHG YDULDEOH DV FRQVWDQW LW LV GHFODUHG DV YDULDEOH IRU WHVWLQJ

\$WWULEXWHV

1DPH	9DOXH
Compiler Install Path	\$(ProgramFiles)\Texas Instruments\ccsv4\tools\compiler\tms470_4.9.5
Float Precision	9
InitObjDir	\$(PROJECTROOT)\UnitTestEnv\static_build_files\obj
InitSrcDir	\$(PROJECTROOT)\UnitTestEnv\static_build_files\src
Linker File	\$(PROJECTROOT)\UnitTestEnv\static_build_files\sys_link.cmd
Makefile Template	\$(PROJECTROOT)\UnitTestEnv\config\Nexteer_ts_make_ude_ti_tms570_ps.tpl
Target Install Path	\$(ProgramFiles)\pls\UDE 3.2
Timer Enabled	false

\$WWULEXWHV	
1DPH	9DOXH
Timer Prescale	0
Timer Resolution	1
Timer Unit	Cycles
UDE Config File	\$(PROJECTROOT)\UnitTestEnv\config\TMS570_UDE_12PIN_JTAG.cfg
Workspace File	D:\Synergy_Work_Area\DiagMgr_Failaction\UnitTestEnv\config\UDE_TMS570_DEBUG.WSP



7HVW &DVH 0HWULFV 7HVW



6SHFLILFDWPHQW
Performance Metrics (With "None" Instrumentation
and WithPS Environment)
CPU Cycles:

TS1.1 25.00 Cycles
TS1.2 25.00 Cycles

'HVFULSWLRQ'FWRU 'HVFULSWLRQ

76 6KRUWHVW ([HFXWLRQ 3DWK 'DWD %LW0DVN 8 758(
76 /RQJHVW ([HFXWLRQ 3DWK 'DWD %LW0DVN 8)\$/6(

7HVW 6WHS 5HSHDW &RXQW



1DPH ,QSW 9DOXH

%LW0DVN

'DWD

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
%LWODVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(5HV)	
QRQH		1R &DOO ([SHFWHG		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
%LWODVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(5HV)	
QRQH		1R &DOO ([SHFWHG		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
%LWODVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(5HV)	
QRQH		1R &DOO ([SHFWHG		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
%LWODVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(5HV)	
QRQH		1R &DOO ([SHFWHG		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSWX 9DOXH			
%LWODVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(	([SHFWHG)XQFWLRQ	&RX(5HV)	
QRQH		1R &DOO ([SHFWHG		✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSW 9DOXH			
%LW0DVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(([SHFWHG)XQFWLRQ	&RX(5HV)		
QRQH	1R &DOO ([SHFWHG			✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSW 9DOXH			
%LW0DVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(([SHFWHG)XQFWLRQ	&RX(5HV)		
QRQH	1R &DOO ([SHFWHG			✓

7HVW &DVH 3DWK 7HVW				✓
6SHFLILFDWLRQ Performance Metrics (With "None" Instrumentation and WithPS Environment) CPU Cycles:				
TS3.1 25.00 Cycles				
TS3.2 25.00 Cycles				
'HVFULSWLRQ				
76 5HWXUQ)\$/6(
76 5HWXUQ 758(

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSW 9DOXH			
%LW0DVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(([SHFWHG)XQFWLRQ	&RX(5HV)		
QRQH	1R &DOO ([SHFWHG			✓

7HVW 6WHS 5HSHDW &RXQW				✓
1DPH	,QSW 9DOXH			
%LW0DVN				
'DWD				
1DPH	\$FWXDO 9DOXH	([SHFWHG 9DOXH	5HV)	
5HDG%LWBX				✓

7HVW 6WHS &DOO 7UDFH				✓
\$FWXDO)XQFWLRQ	&RX(([SHFWHG)XQFWLRQ	&RX(5HV)		
QRQH	1R &DOO ([SHFWHG			✓