

Experimental Results for the Litmus Tests Cited in the Paper

(supplementary material for Modelling the ARMv8 Architecture, Operationally:
Concurrency and ISA)

ARMv8 experimental results:

	Flowing	POP	Hardware	Denver64	A8X	Snapdragon810
MP+dmb.sy+addr	Forbid	Forbid	Ok, 0/6.2G	Ok, 0/1.1G	Ok, 0/4.0G	Ok, 0/1.2G
MP+dmb.sy+fri-rfi-ctrlisb	Allow	Allow	No, 0/9.4G Allow unseen	No, 0/2.5G Allow unseen	No, 0/5.6G Allow unseen	No, 0/1.2G Allow unseen
MP+dmb.sy+pos-fri-rfi-ctrlisb	Allow	Allow	No, 0/5.6G Allow unseen	No, 0/2.5G Allow unseen	No, 0/2.4G Allow unseen	No, 0/662M Allow unseen
RSW	Allow	Allow	Ok, 1.1M/17G	No, 0/6.7G Allow unseen	Ok, 488k/8.6G	Ok, 605k/1.2G
LB+data+data-wsi	Allow	Allow	No, 0/14M Allow unseen	—	—	No, 0/14M Allow unseen
WRC+addrs	Allow	Allow	No, 0/4.0G Allow unseen	—	No, 0/3.4G Allow unseen	No, 0/605M Allow unseen

ARMv7 Experimental results:

	Models	Hardware	Tegra2	APQ8060	A5X	A6X	Exynos5250	Tegra3	Exynos4412	Exynos5410	APQ8064
MP+dmb+fri-rfi-ctrlisb	Allow	Ok, 153k/222G	No, 0/56G Allow unseen	Ok, 153k/10G	No, 0/9.0G Allow unseen	No, 0/19G Allow unseen	No, 0/14G Allow unseen	No, 0/62G Allow unseen	No, 0/34G Allow unseen	No, 0/6.8G Allow unseen	No, 0/10G Allow unseen
MP+dmb+pos-fri-rfi-ctrlisb	Allow	Ok, 65k/126G	No, 0/30G Allow unseen	Ok, 65k/5.7G	No, 0/6.3G Allow unseen	No, 0/15G Allow unseen	No, 0/14G Allow unseen	No, 0/22G Allow unseen	No, 0/15G Allow unseen	No, 0/6.8G Allow unseen	No, 0/12G Allow unseen
RSW	Allow	Ok, 1.0M/178G	No, 0/38G Allow unseen	No, 0/33G Allow unseen	No, 0/9.0G Allow unseen	Ok, 5.0k/11G	Ok, 1.0M/7.2G	No, 0/46G Allow unseen	No, 0/22G Allow unseen	Ok, 12k/560M	No, 0/10G Allow unseen
LB+data+data-wsi	Allow	No, 0/203G Allow unseen	No, 0/12G Allow unseen	No, 0/18G Allow unseen	—	No, 0/5.0G Allow unseen	No, 0/12G Allow unseen	No, 0/36G Allow unseen	No, 0/36G Allow unseen	No, 0/43G Allow unseen	No, 0/41G Allow unseen
WRC+addrs	Allow	No, 0/43G Allow unseen	—	—	—	—	—	No, 0/23G Allow unseen	No, 0/11G Allow unseen	No, 0/3.4G Allow unseen	No, 0/5.1G Allow unseen