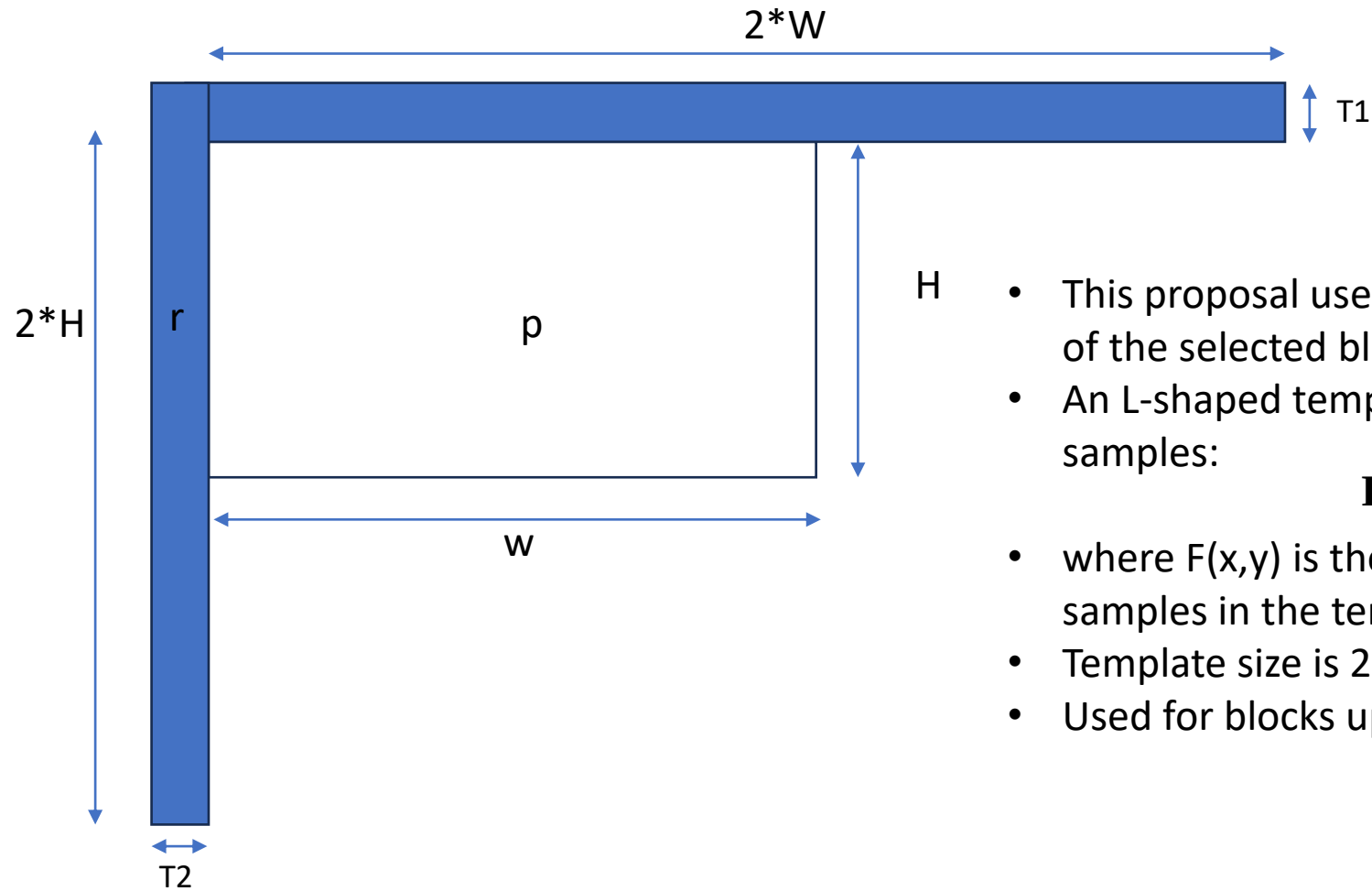


Non-EE2: Modifications to Matrix-based Intra Prediction

JVET-AH0210

H. Wang, B. Ray, V. Seregin, M. Karczewicz, P. Garus, S. Eadie
(Qualcomm)



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- This proposal uses increased matrix size for the MIP modes of the selected block sizes.
- An L-shaped template is used to calculate prediction samples:

$$P(x,y) = \sum_k F(x,y,k) * r(k),$$

- where $F(x,y)$ is the vector of weights, r is the reference samples in the template.
- Template size is 2.
- Used for blocks up to 32×32 , except $32 \times 4 / 4 \times 32$, $32 \times 8 / 8 \times 32$.

Simulation results

	All Intra Main 10						
	Over ECM-12.0						
	Y	U	V	EncT	DecT	EncVmPeak	DecVmPeak
Class A1	-0.08%	-0.07%	-0.03%	101.5%	102.4%	100.1%	100.5%
Class A2	-0.14%	-0.15%	-0.14%	101.4%	101.3%	100.1%	100.5%
Class B	-0.28%	-0.30%	-0.17%	101.6%	102.1%	100.3%	100.7%
Class C	-0.36%	-0.36%	-0.32%	101.1%	101.7%	100.5%	100.9%
Class E	-0.62%	-0.54%	-0.75%	99.8%	101.6%	101.2%	100.9%
Overall	-0.30%	-0.29%	-0.27%	101.2%	101.8%	100.4%	100.7%
Class D	-0.25%	-0.13%	-0.27%	101.2%	104.4%	100.5%	101.0%
Class F	-0.15%	-0.11%	-0.11%	100.7%	102.0%	100.4%	100.9%

Thanks!