AETHER V0 — Binder Packet (GF-01)

Ticks 1–8 • Paper-first deterministic run

Run: GF-01 | Profile: CMP-0 | N=6, SC=32, W=8, M=1000000007, C0=1234567

Edges (ID order): 1:1-2(k=1), 2:1-4(k=2), 3:1-6(k=1), 4:2-3(k=1), 5:2-5(k=2), 6:3-4(k=1), 7:4-5(k=1), 8:5-6(k=1)

Window manifest_check: 487809945

I-block C_8: 588473909

Spine Label (print & cut)

Place inside binder spine

AETHER V0 — GF-01

Ticks 1–8

manifest 487809945

C8 588473909

Profile CMP-0

Section 1 — Gate: NAP Envelopes

A1 forms for ticks 1–8 (payload_ref = manifest_check)

A1 — NAP Envelope (Updated with payload_ref)

Tick 1 — Window manifest_check applied

v	tick
1	1
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	1
prev_chain	sig
1234567	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 2 — Window manifest_check applied

v	tick
1	2
gid	**nid**
GF01	N/A
layer	**mode**
DATA	P
payload_ref	**seq**
487809945	2
prev_chain	**sig**
20987847	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 3 — Window manifest_check applied

v	tick
1	3
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	3
prev_chain	sig
356793608	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 4 — Window manifest_check applied

v	tick
1	4
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	4
prev_chain	sig
65491504	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 5 — Window manifest_check applied

v	tick
1	5
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	5
prev_chain	sig
113355772	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 6 — Window manifest_check applied

v	tick
1	6
gid	**nid**
GF01	N/A
layer	**mode**
DATA	P
payload_ref	**seq**
487809945	6
prev_chain	**sig**
927048329	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 7 — Window manifest_check applied

v	tick
1	7
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	7
prev_chain	sig
759821701	(witness at I-block)

A1 — NAP Envelope (Updated with payload_ref)

Tick 8 — Window manifest_check applied

v	tick
1	8
gid	nid
GF01	N/A
layer	mode
DATA	P
payload_ref	seq
487809945	8
prev_chain	sig
916969047	(witness at I-block)

Section 2 — UMX Tick Ledgers

A2 forms for ticks 1–8

A2 — UMX Tick Ledger (Filled)

tick	Σ pre_u	Σ post_u	Σ_check (must match)
1	4	4	OK

Tick 1

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	1	2	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 2

tick	Σ pre_u	Σ post_u	Σ_check (must match)
2	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	1	2	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 3

tick	Σ pre_u	Σ post_u	Σ_check (must match)
3	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	u	v	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 4

tick	Σ pre_u	Σ post_u	Σ_check (must match)
4	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	u	v	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

tick	Σ pre_u	Σ post_u	Σ_check (must match)
5	4	4	OK

Tick 5

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	1	2	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 6

tick	Σ pre_u	Σ post_u	Σ_check (must match)
6	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	1	2	3	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 7

tick	Σ pre_u	Σ post_u	Σ_check (must match)
7	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	u	v	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

A2 — UMX Tick Ledger (Filled)

Tick 8

tick	Σ pre_u	Σ post_u	Σ_check (must match)
8	4	4	OK

pre_u[1..6]: 3, 1, 0, 0, 0, 0

Edges (ID order) with du, raw, f_e:

e_id	1	2	du	raw=floor(k*|du|/SC)	cap	f_e
2	1	4	3	0	∞	0
3	1	6	3	0	∞	0
4	2	3	1	0	∞	0
5	2	5	1	0	∞	0
6	3	4	0	0	∞	0
7	4	5	0	0	∞	0
8	5	6	0	0	∞	0

post_u[1..6]: 3, 1, 0, 0, 0, 0

Section 3 — Loom

A3 P-blocks for ticks 1–8 + A4 I-block at t=8

A3 — Loom P-Block (Filled)

Tick 1

tick	seq	s_t	C_t
1	1	9	20987847

Edge flux summary (f_e):

e_{id}	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

$C_1 = (17*1234567 + 23*9 + 1) \bmod 1000000007 = 20987847$

A3 — Loom P-Block (Filled)

Tick 2

tick	seq	s_t	C_t
2	2	9	356793608

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_2 = (17*20987847 + 23*9 + 2) mod 1000000007 = 356793608

A3 — Loom P-Block (Filled)

Tick 3

tick	seq	s_t	C_t
3	3	9	65491504

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_3 = (17*356793608 + 23*9 + 3) mod 1000000007 = 65491504

A3 — Loom P-Block (Filled)

Tick 4

tick	seq	s_t	C_t
4	4	9	113355772

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_4 = (17*65491504 + 23*9 + 4) mod 1000000007 = 113355772

A3 — Loom P-Block (Filled)

Tick 5

tick	seq	s_t	C_t
5	5	9	927048329

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_5 = (17*113355772 + 23*9 + 5) mod 1000000007 = 927048329

A3 — Loom P-Block (Filled)

Tick 6

tick	seq	s_t	C_t
6	6	9	759821701

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_6 = (17*927048329 + 23*9 + 6) mod 1000000007 = 759821701

A3 — Loom P-Block (Filled)

Tick 7

tick	seq	s_t	C_t
7	7	9	916969047

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_7 = (17*759821701 + 23*9 + 7) mod 1000000007 = 916969047

A3 — Loom P-Block (Filled)

Tick 8

tick	seq	s_t	C_t
8	8	9	588473909

Edge flux summary (f_e):

e_id	f_e
2	0
3	0
4	0
5	0
6	0
7	0
8	0

C_8 = (17*916969047 + 23*9 + 8) mod 1000000007 = 588473909

A4 — Loom I-Block (Filled)

Checkpoint at t=8

tick	W	C_t	Profile version
8	8	588473909	CMP-0

post_u[1..6]: 3, 1, 0, 0, 0, 0

Topology & params snapshot:

e_id	1	2	k	cap	SC	t
2	1	4	2	∞	32	1
3	1	6	1	∞	32	1
4	2	3	1	∞	32	1
5	2	5	2	∞	32	1
6	3	4	1	∞	32	1
7	4	5	1	∞	32	1
8	5	6	1	∞	32	1

Section 4 — Astral Press Capsule

A5–A8 prefilled for ticks 1–8

A5 — APX Manifest (Prefilled)

APX name

GF01_APX_v0_full_window

profile

CMP-0

manifest_check

487809945

stream_id	description	scheme	params	L_model	L_residual	L_total
S1_post_u_deltas	Per-tick net change of B_v	ΔB per node (t=1..8, nodes asc)		0	0	7
S2_fluxes	Per-tick edge flux f_e	ΔB (t=1..8, edges in ID order)		0	0	8

A6 — APX SimA Model (Prefilled) — S1_post_u_deltas

Chosen scheme: ΔR; L_total=7 bits

candidate	param	L_total(bits)
ID		48
GR	p=0	48
GR	p=1	96
GR	p=2	144
GR	p=3	192
GR	p=4	240
ΔR		7

A6 — APX SimA Model (Prefilled) — S2_fluxes

Chosen scheme: ΔR; L_total=8 bits

candidate	param	L_total(bits)
ID		64
GR	p=0	64
GR	p=1	128
GR	p=2	192
GR	p=3	256
GR	p=4	320
ΔR		8

A7 — APX Residuals (Prefilled)

Exact schemes selected; residuals not required (L_residual=0).

stream_id	residual_entries
S1_post_u_deltas	(none)
S2_fluxes	(none)

A8 — MDL Tally (Prefilled)

stream_id	candidate	param	L_total(bits)	chosen?
S1_post_u_deltas	ID		48	
S1_post_u_deltas	GR	p=0	48	
S1_post_u_deltas	GR	p=1	96	
S1_post_u_deltas	GR	p=2	144	
S1_post_u_deltas	GR	p=3	192	
S1_post_u_deltas	GR	p=4	240	
S1_post_u_deltas	ΔR		7	✓
S2_fluxes	ID		64	
S2_fluxes	GR	p=0	64	
S2_fluxes	GR	p=1	128	
S2_fluxes	GR	p=2	192	
S2_fluxes	GR	p=3	256	
S2_fluxes	GR	p=4	320	
S2_fluxes	ΔR		8	✓