PC - 0.30c, 1.7, 1.8, 15w40b, 1.9, 1.9.1-pre2, 1.9.2, 1.9.4, 16w20a, 1.10-pre1, 1.10, 1.10.1, 1.10.2, 16w35a, 1.11, 1.11.2, 17w15a, 17w18b, 1.12-pre4, 1.12, 1.12.1, 1.12.2, 17w50a, 1.13, 1.13.1, 1.13.2-pre1, 1.13.2-pre2, 1.13.2, 1.14, 1.14.1, 1.14.3, 1.14.4, 1.15, 1.15.1, 1.15.2, 20w13b, 20w14a, 1.16-rc1, 1.16, 1.16.1, 1.16.2, 1.16.3, 1.16.4, 21w07a, 1.17, 1.17.1, 1.18, 1.18.1, 1.18.2, 1.19, 1.19.2, 1.19.3, 1.19.4, 1.20, 1.20.1, 1.20.2, 1.20.3, 1.20.4

Bedrock - 0.14, 0.15, 1.0, 1.16.201, 1.16.210, 1.16.220, 1.17.0, 1.17.10, 1.17.30, 1.17.40, 1.18.0, 1.18.11, 1.18.30, 1.19.1, 1.19.10, 1.19.20, 1.19.21, 1.19.30, 1.19.40, 1.19.50, 1.19.60, 1.19.62, 1.19.63, 1.19.70, 1.19.80, 1.20.0, 1.20.10, 1.20.15, 1.20.30, 1.20.40, 1.20.50, 1.20.61, 1.20.71

Biomes Instruments Items

Materials Blocks

Recipes

Entities Protocol

Windows

Effects

handshaking

toClient

toServer

Packet ID	State	Bound To	Field Name	Field Type
0x00	handshaking	toServer	protocolVersion	varint
			serverHost	string
			serverPort	u16
			nextState	varint

Packet ID	State	Bound To	Field Name	Field Type
0xfe	handshaking	toServer	payload	u8

status

toClient

S server info

Packet ID	State	Bound To	Field Name	Field Type
0x00	status	toClient	response	string

S ping

Packet ID	State	Bound To	Field Name	Field Type
0x01	status	toClient	time	i64

toServer

${\cal S}$ ping_start

Packet ID	State	Bound To	Field Name	Field Type
0x00	status	toServer	no fields	

§ ping

Packet ID	State	Bound To	Field Name	Field Type
0x01	status	toServer	time	i64

login

toClient

${\cal S}$ disconnect

Packet ID	State	Bound To	Field Name	Field Type
0x00	login	toClient	reason	string

Ø encryption_begin

Packet ID	State	Bound To	Field Name	Field Type
0x01	login	toClient	serverld	string
			publicKey	buffer
			verifyToken	buffer

S success

Packet ID	State	Bound To	Field Name	Field Type
0x02	login	toClient	uuid	string
			username	string

𝒰 compress

Packet ID	State	Bound To	Field Name	Field Type
0x03	login	toClient	threshold	varint

toServer

ℰ login_start

Packet ID	State	Bound To	Field Name	Field Type
0x00	login	toServer	username	string

ℰ encryption_begin

Packet ID	State	Bound To	Field Name	Field Type
0x01	login	toServer	sharedSecret	buffer
			verifyToken	buffer

play

toClient

 ${\cal S}$ spawn_entity

Packet ID	State	Bound To	Field Name	Field Type
0x00	play	toClient	entityId	varint
			objectUUID	UUID
			type	i8
			х	f64
			у	f64
			z	f64
			pitch	i8
			yaw	i8
			objectData	i32
			velocityX	i16
			velocityY	i16
			velocityZ	i16

Packet ID	State	Bound To	Field Name	Field Type
0x01	play	toClient	entityId	varint
			x	f64
			у	f64
			z	f64
			count	i16

❖ spawn_entity_weather

Packet ID	State	Bound To	Field Name	Field Type
0x02	play	toClient	entityId	varint
			type	i8
			x	f64
			у	f64
			z	f64

Packet ID	State	Bound To	Field Name	Field Type
0x03	play	toClient	entityId	varint
			entityUUID	UUID
			type	varint
			х	f64
			у	f64
			z	f64
			yaw	i8
			pitch	i8
			headPitch	i8
			velocityX	i16
			velocityY	i16
			velocityZ	i16
			metadata	entityMetadata

${\cal S}$ spawn_entity_painting

Packet ID	State	Bound To	Field Name	Field Type
0x04	play	toClient	entityId	varint
			entityUUID	UUID
			title	string
			location	position
			direction	u8

${\cal S}$ named_entity_spawn

Packet ID	State	Bound To	Field Name	Field Type
0x05	play	toClient	entityId	varint
			playerUUID	UUID
			х	f64
			у	f64
			z	f64
			yaw	i8
		pitch	i8	
			metadata	entityMetadata

${\cal S}$ animation

Packet ID	State	Bound To	Field Name	Field Type
0x06	play	toClient	entityId	varint
			animation	u8



Packet ID	State	Bound To	Field Name				Field Type	
0x07	play	toClient	entries	\$countType		array	varir	nt
				\$content	name		container	string
					value			varint

${\cal S}$ advancements

Packet ID	State	Bound To		Field Name							Field	Туре															
0x4d	play	toClient			rese	et					bo	ool															
			advancementMapping			\$countTyp	е		array			varint															
				\$content		ı	кеу			container		strin	g														
					value		parentld				container		option														
						(displayData						option														
						criteria	\$co	untType				array	varii	nt													
							\$content	key							container	str											
								value					V														
						requirements	\$countType	\$countType		s \$countType		\$countType		\$countType		\$countType		\$countType	\$countType		\$countType				array	varii	nt
							\$content	\$countType					array	va													
								\$content						str													
			identifiers			\$countTyp	е		array			varint															
				\$content						string																	
			progressMapping			\$countTyp	е		array		varint																
				\$content	key			container	er string																		
					value		\$countType				array		varint														
						\$content	criterio	onldentifier			contai	container	strin	ng													
							criterio	nProgress					optio	on													

Packet ID	State	Bound To	Field Name	Field Type
0x08	play	toClient	entityId	varint
			location	position
			destroyStage	i8

Packet ID	State	Bound To	Field Name	Field Type
0x09	play	toClient	location	position
			action	u8
			nbtData	optionalNbt

 ${\cal S}$ block_action

Packet ID	State	Bound To	Field Name	Field Type
0x0a	play	toClient	toClient location	
			byte1	u8
			byte2	u8
			blockId	varint

${\cal S}$ block_change

Packet ID	State	Bound To	Field Name	Field Type
0x0b	play	toClient	location	position
			type	varint

ℰ boss_bar

Packet ID	State	Bound To	Field Name		Field	Туре
0x0c	play	toClient	entityUUID		UU	ID
				action		int
			title if (action == 0 action == 3)		switch	string
			health	if (action == 0 action == 2)	switch	f32
			color	if (action == 0 action == 4)	switch	varint
			dividers if (action == 0 action == 4)		switch	varint
			flags	if (action == 0 action == 5)	switch	u8

§ difficulty

Packet ID	State	Bound To	Field Name	Field Type
0x0d	play	toClient	difficulty	u8

${\cal S}$ tab_complete

Packet ID	State	Bound To	Field Name		Field	Туре
0x0e	play	toClient	matches	\$countType	array	varint
				\$content		string

ℰ chat

Packet ID	State	Bound To	Field Name	Field Type
0x0f	play	toClient	message	string
			position	i8

${\cal S}$ multi_block_change

Packet ID	State	Bound To	Field Name				Field Type	
0x10	play	toClient	chunkX				i32	
			chunkZ				i32	
			records	\$cc	ountType	array	varin	it
				\$content	horizontalPos		container	u8
				у				u8
					blockld			varint

𝒰 transaction

Packet ID	State	Bound To	Field Name	Field Type
0x11	play	toClient	windowld	i8
			action	i16
			accepted	bool

${\cal S}$ close_window

Packet ID	State	Bound To	Field Name	Field Type
0x12	play	toClient	windowld	u8

${\cal S}$ open_window

Packet ID	State	Bound To		Field Name		
0x13	play	toClient	windowld		u8	
				inventoryType		g
				windowTitle	strin	g
				slotCount		
			entityId	if (inventoryType == EntityHorse)	switch	i32

${\cal S}$ window_items

Packet ID	State	Bound To	Field Name		Field '	Туре
0x14	play	toClient	w	rindowld	u8	3
			items	\$countType	array	i16
				\$content		slot

ℰ craft_progress_bar

Packet ID	State	Bound To	Field Name	Field Type
0x15	play	toClient	windowld	u8
			property	i16
			value	i16

Packet ID	State	Bound To	Field Name	Field Type
0x16	play	toClient	windowld	i8
			slot	i16
			item	slot

${\cal S}$ set_cooldown

Packet ID	State	Bound To	Field Name	Field Type
0x17	play	toClient	itemID	varint
			cooldownTicks	varint

Packet ID	State	Bound To	Field Name	Field Type
0x18	play	toClient	channel	string
			data	restBuffer

${\cal S}$ named_sound_effect

Packet ID	State	Bound To	Field Name	Field Type
0x19	play	toClient	soundName	string
			soundCategory	varint
			х	i32
		у		i32
			z	i32
			volume	f32
			pitch	f32

Packet ID	State	Bound To	Field Name	Field Type
0x1a	play	toClient	reason	string

${\cal S}$ entity_status

Packet ID	State	Bound To	Field Name	Field Type
0x1b	play	toClient	entityId	i32
			entityStatus	i8

${\cal S}$ explosion

Packet ID	State	Bound To	Field Nan	ne		Field Type					
0x1c	play	toClient	х				f32				
				У		у				f32	
				z			Z			f32	
			radius		f32						
			affectedBlockOffsets	\$countTy	ре	array	i32				
				\$content	х		container	i8			
					у			i8			
					z			i8			
			playerMotio	onX		f32					
			playerMotio	ayerMotionY			f32				
			playerMotio	onZ		f32					

ℰ unload_chunk

Packet ID	State	Bound To	Field Name	Field Type
0x1d	play	toClient	chunkX	i32
			chunkZ	i32

Packet ID	State	Bound To	Field Name	Field Type
0x1e	play	toClient	reason	u8
			gameMode	f32

${\cal S}$ keep_alive

Packet ID	State	Bound To	Field Name	Field Type
0x1f	play	toClient	keepAliveId	i64

${\cal S}$ map_chunk

Packet ID	State	Bound To	Field I	Name	Field	I Type	
0x20	play	toClient	х	:	i3	32	
			z		i32		
			grour	ndUp	bo	ool	
			bitN	lap	va	/arint	
			chunk	Data	bu	ffer	
			blockEntities	\$countType	array	varint	
				\$content		nbt	

 ${\cal S}$ world_event

Packet ID	State	Bound To	Field Name	Field Type
0x21	play	toClient	effectId	i32
			location	position
			data	i32
			global	bool

${\cal S}$ world_particles

Packet ID	State	Bound To	Field Name				eld Typ	е	
0x22	play	toClient		particleId		i32			
				longDistance			bool		
				х	f32				
		у			f32				
			z			f32			
		offsetX				f32			
				offsetY f32					
				offsetZ f32					
			particleData			particleData f32			
				particles			i32		
			data	if (particleId == 36)	\$content	switch	array	varir	
				else if (particleId == 37 particleId == 38)	\$content		array	varir	

${\cal S}$ login

Packet ID	State	Bound To	Field Name	Field Type
0x23	play	toClient	entityId	i32
			gameMode	u8
			dimension	i32
			difficulty	u8
			maxPlayers	u8
			levelType	string
			reducedDebugInfo	bool

ℰ map

Packet ID	State	Bound To		Field	Name	F	ield Type							
0x24	play	toClient		itemDamage			varint							
				sc	ale		i8							
				tracking	Position		bool							
			icons	\$	countType	array	varint							
				\$content	directionAndType		container	i8						
			х				i8							
					Z			iā						
				colu	ımns	i8								
			rows	if (c	olumns == 0)	switch	void							
					else		i8							
			х	if (c	olumns == 0)	switch	void							
					else		i8							
									у	if (c	olumns == 0)	switch	void	
					else		i8							
			data	data if (columns == 0)		switch	void							
					else		buffer							

Packet ID	State	Bound To	Field Name	Field Type
0x26	play	toClient	entityId	varint
			dX	i16
			dY	i16
			dZ	i16
			onGround	bool

${\cal S}$ entity_move_look

Packet ID	State	Bound To	Field Name	Field Type
0x27	play	toClient	entityId	varint
			dX	i16
			dY	i16
			dZ	i16
			yaw	i8
			pitch	i8
			onGround	bool

ℰ entity_look

Packet ID	State	Bound To	Field Name	Field Type
0x28	play	toClient	entityId	varint
			yaw	i8
			pitch	i8
			onGround	bool

${\cal S}$ entity

Packet ID	State	Bound To	Field Name	Field Type
0x25	play	toClient	entityId	varint

${\cal S}$ vehicle_move

Packet ID	State	Bound To	Field Name	Field Type
0x29	play	toClient	x	f64
			у	f64
			z	f64
			yaw	f32
			pitch	f32

Ø open_sign_entity

Packet ID	State	Bound To	Field Name	Field Type
0x2a	play	toClient	location	position

ℰ craft_recipe_response

Packet ID	State	Bound To	Field Name	Field Type
0x2b	play	toClient	windowld	i8
			recipe	varint

Packet ID	State	Bound To	Field Name	Field Type
0x2c	play	toClient	flags	i8
			flyingSpeed	f32
			walkingSpeed	f32

${\cal S}$ combat_event

Packet ID	State	Bound To		Field Name	Field Type		
0x2d	play	toClient		varint			
			duration	switch	varint		
			playerId	switch	varint		
			entityId	if (event == 1 event == 2)	switch	i32	
			message	if (event == 2)	switch	string	

Packet ID	State	Bound To		Field Name							Field	Туре		
0x2e	play	toClient		action						va	rint			
			data			\$countType			array			varint		
				\$content	UUID				container		l	JUID		
					name	name if (/action == 0)				switch		string		
					properties	if (/action == 0)	(/action == 0) \$countType				switch arra	array	y varint	
							\$content	name					container	string
								value						string
								signature						option
					gamemode	gamemode if (/action == 0 /action == 1)				switch		varint		
					ping	if (/action ==	: 0 /actio	n == 2)			switch		varint	
					displayName	if (/action ==	: 0 /actio	n == 3)			switch		option	

${\cal S}$ position

Packet ID	State	Bound To	Field Name	Field Type
0x2f	play	toClient	x	f64
			у	f64
			z	f64
			yaw	f32
			pitch	f32
			flags	i8
			teleportId	varint

ℰ bed

Packet ID	State	Bound To	Field Name	Field Type
0x30	play	toClient	entityId	varint
			location	position

Packet ID	State	Bound To	Field Name		Field Type		е	
0x31	play	toClient	action			varint		
			craftingBookOpen			bool		
			filteringCraftable			bool		
			recipes1	\$count	Туре	array	va	rint
				\$cont	ent		va	rint
			recipes2	if (action == 0) \$countType		switch	array	varint
					\$content			varint

 ${\cal S}$ entity_destroy

Packet ID	State	Bound To	Field Name		Field	Туре
0x32	play	toClient	entityIds	\$countType	array	varint
				\$content		varint

Packet ID	State	Bound To	Field Name	Field Type
0x33	play	toClient	entityId	varint
			effectId	i8

ø resource_pack_send

Packet ID	State	Bound To	Field Name	Field Type
0x34	play	toClient	url	string
			hash	string

ℰ respawn

Packet ID	State	Bound To	Field Name	Field Type
0x35	play	toClient	dimension	i32
			difficulty	u8
			gamemode	u8
			levelType	string

${\cal S}$ entity_head_rotation

Packet ID	State	Bound To	Field Name	Field Type
0x36	play	toClient	entityId	varint
			headYaw	i8

Packet ID	State	Bound To		Field Name	Field Type					
0x38	play	toClient		action	varint					
			radius	if (action == 0)	switch	f64				
				х	if (action == 2 action == 3)	switch	f64			
							Z	if (action == 2 action == 3)	switch	f64
			old_radius	if (action == 1 action == 3)	switch	f64				
			new_radius	if (action == 1 action == 3)	switch	f64				
			speed	if (action == 1 action == 3)	switch	varlong				
			portalBoundary	if (action == 3)	switch	varint				
			warning_time	if (action == 3 action == 4)	switch	varint				
			warning_blocks	if (action == 3 action == 5)	switch	varint				



Packet ID	State	Bound To	Field Name	Field Type
0x39	play	toClient	camerald	varint

Packet ID	State	Bound To	Field Name	Field Type
0x3a	play	toClient	slot	i8

∳ scoreboard_display_objective

Packet ID	State	Bound To	Field Name	Field Type
0x3b	play	toClient	position	i8
			name	string

${\cal S}$ entity_metadata

Packet ID	State	Bound To	Field Name	Field Type
0x3c	play	toClient	entityId	varint
			metadata	entityMetadata

${\cal S}$ attach_entity

Packet ID	State	Bound To	Field Name	Field Type
0x3d	play	toClient	entityId	i32
			vehicleId	i32

${\cal S}$ entity_velocity

Packet ID	State	Bound To	Field Name	Field Type
0x3e	play	toClient	entityId	varint
			velocityX	i16
			velocityY	i16
			velocityZ	i16

${\cal S}$ entity_equipment

Packet ID	State	Bound To	Field Name	Field Type
0x3f	play	toClient	entityId	varint
			slot	varint
			item	slot

Packet ID	State	Bound To	Field Name	Field Type
0x40	play	toClient	experienceBar	f32
			level	varint
			totalExperience	varint

${\cal S}$ update_health

Packet ID	State	Bound To	Field Name	Field Type
0x41	play	toClient	health	f32
			food	varint
			foodSaturation	f32

${\cal S}$ scoreboard_objective

Packet ID	State	Bound To	Field Name		Field Type	
0x42	play	toClient	name		stri	ng
			action		i8	3
			displayText if (action == 0 action == 2)		switch	string
			type	if (action == 0 action == 2)	switch	string

Packet ID	State	state Bound To Field Nan		Field Name		Туре
0x43	play	toClient	entityId		va	rint
			passengers	\$countType	array	varint
				\$content		varint

ℰ teams

Packet ID	State	Bound To		Field Name				Field Type		
0x44	play	toClient	team				string			
			mode				i8			
			name if (mode == 0 mode == 2)		switch	str	ing			
			prefix if (mode == 0 mode == 2)			switch	str	ing		
			suffix	suffix if (mode == 0 mode == 2)		switch	str	ing		
			friendlyFire	if (mode == 0 mode == 2)		switch	i	8		
			nameTagVisibility	if (mode == 0 mode == 2)		switch	str	ing		
			collisionRule	if (mode == 0 mode == 2)		switch	str	ing		
			color if (mode == 0 mode == 2) s		switch	i	8			
			players if (mode == 0 mode == 3 mode == 4) \$countType s		switch	array	varin			
					\$content			string		

Packet ID	State	Bound To	Field Name		Field Type	
0x45	play	toClient	itemName		string	
				action scoreName		int
			s			ng
			value	if (action == 1)	switch	void
				else		varint

Packet ID	State	Bound To	Field Name	Field Type
0x46	play	toClient	location	position

𝚱 update_time

Packet ID	State	Bound To	Field Name	Field Type
0x47	play	toClient	age	i64
			time	i64

ℰ title

Packet ID	State	Bound To	Field Name			Туре
0x48	play	toClient	action		varint	
			text	if (action == 0 action == 1 action == 2)	switch	string
			fadeln	if (action == 3)	switch	i32
			stay	if (action == 3)	switch	i32
			fadeOut	if (action == 3)	switch	i32

${\cal S}$ sound_effect

Packet ID	State	Bound To	Field Name	Field Type
0x49	play	toClient	soundId	varint
			soundCategory	varint
			х	i32
			у	i32
			z	i32
			volume	f32
			pitch	f32

Packet ID	State	Bound To	Field Name	Field Type
0x4a	play	toClient	header	string
			footer	string

Packet ID	State	Bound To	Field Name	Field Type
0x4b	play	toClient	collectedEntityId	varint
			collectorEntityId	varint
			pickupItemCount	varint

${\cal S}$ entity_teleport

Packet ID	State	Bound To	Field Name	Field Type
0x4c	play	toClient	entityId	varint
			x	f64
			у	f64
			z	f64
			yaw	i8
			pitch	i8
			onGround	bool

${\cal S}$ entity_update_attributes

Packet ID	State	Bound To	Field Name				F	ield Typ	е			
0x4e	play	toClient		entityId			varint					
			properties	\$countType			array		i3	32		
				\$content	key			container		string		
					value						f64	
					modifiers	\$cour	ntType			array	varir	nt
						\$content	uuid				container	UUID
							amount					f64
							operation					i8

${\cal S}$ entity_effect

Packet ID	State	Bound To	Field Name	Field Type
0x4f	play	toClient	entityId	varint
			effectId	i8
			amplifier	i8
			duration	varint
			hideParticles	i8

Packet ID	State	Bound To	Field Name	Field Type
0x37	play	toClient	id	option

toServer

${\cal S}$ teleport_confirm

Packet ID	State	Bound To	Field Name	Field Type
0x00	play	toServer	teleportId	varint

 ${\cal S}$ tab_complete

Packet ID	State	Bound To	Field Name	Field Type
0x01	play	toServer	text	string
			assumeCommand	bool
			lookedAtBlock	option

ℰ chat

Packet ID	State	Bound To	Field Name	Field Type
0x02	play	toServer	message	string

${\cal S}$ client_command

Packet ID	State	Bound To	Field Name	Field Type
0x03	play	toServer	actionId	varint

𝑉 settings

Packet ID	State	Bound To	Field Name	Field Type
0x04	play	play toServer	locale	string
			viewDistance	i8
			chatFlags	varint
			chatColors	bool
			skinParts	u8
			mainHand	varint

${\cal S}$ transaction

Packet ID	State	Bound To	Field Name	Field Type
0x05	play	toServer	windowld	i8
			action	i16
			accepted	bool

${\cal S}$ enchant_item

Packet ID	State	Bound To	Field Name	Field Type
0x06	play	toServer	windowld	i8
			enchantment	i8

Packet ID	State	Bound To	Field Name	Field Type
0x07	play	toServer	windowld	u8
		-	slot	i16
			mouseButton	i8
			action	i16
			mode	i8
			item	slot

${\cal S}$ close_window

Packet ID	State	Bound To	Field Name	Field Type
0x08	play	toServer	windowld	u8

Packet ID	State	Bound To	Field Name	Field Type
0x09	play	toServer	channel	string
			data	restBuffer

${\cal S}$ use_entity

Packet ID	State	Bound To	Field Name		Field Type	
0x0a	play	toServer	target		varint	
			mouse		var	int
			x if (mouse == 2)		switch	f32
			у	y if (mouse == 2)		f32
			z if (mouse == 2)		switch	f32
			hand if (mouse == 0 mouse == 2		switch	varint

Packet ID	State	Bound To	Field Name	Field Type
0x0b	play	toServer	keepAliveId	i64

${\cal S}$ position

Packet ID	State	Bound To	Field Name	Field Type
0x0d	play	toServer	x	f64
		-	у	f64
			z	f64
			onGround	bool

${\cal S}$ position_look

Packet ID	State	Bound To	Field Name	Field Type
0x0e	play	toServer	x	f64
			у	f64
			z	f64
			yaw	f32
			pitch	f32
			onGround	bool

ℰ look

Packet ID	State	Bound To	Field Name	Field Type
0x0f	play	toServer	yaw	f32
		_	pitch	f32
			onGround	bool

§ flying

Packet ID	State	Bound To	Field Name	Field Type
0x0c	play	toServer	onGround	bool

${\cal S}$ vehicle_move

Packet ID	State	Bound To	Field Name	Field Type
0x10	play	toServer	x	f64
			у	f64
			z	f64
			yaw	f32
			pitch	f32

ℰ steer_boat

Packet ID	State	Bound To	Field Name	Field Type
0x11	play	toServer	leftPaddle	bool
			rightPaddle	bool

${\cal S}$ craft_recipe_request

Packet ID	State	Bound To	Field Name	Field Type
0x12	play	toServer	windowld	i8
			recipe	varint
			makeAll	bool

𝒰 abilities

Packet ID	State	Bound To	Field Name	Field Type	
0x13	play	toServer	flags	i8	
				flyingSpeed	f32
			walkingSpeed	f32	

Packet ID	State	Bound To	Field Name	Field Type
0x14	play	toServer	status	varint
			location	position
			face	i8

${\cal S}$ entity_action

Packet ID	State	Bound To	Field Name	Field Type
0x15	play	toServer	entityId	varint
			actionId	varint
			jumpBoost	varint

${\cal S}$ steer_vehicle

Packet ID	State	Bound To	Field Name	Field Type
0x16	play	toServer	sideways	f32
			forward	f32
			jump	u8

ℰ crafting_book_data

Packet ID	State	Bound To	Field Name			Field Type		
0x17	play	toServer	type				varint	
			undefined	if (type == 0)	displayedRecipe	switch	container	i32
				else if (type == 1)	craftingBookOpen		container	bool
					craftingFilter			bool

ø resource_pack_receive

Packet ID	State	Bound To	Field Name	Field Type
0x18	play	toServer	result	varint

Packet ID	State	Bound To	Field Name	Field Type
0x1a	play	toServer	slotId	i16

${\cal S}$ set_creative_slot

Packet ID	State	Bound To	Field Name	Field Type
0x1b	play	toServer	slot	i16
			item	slot

${\cal S}$ update_sign

Packet ID	State	Bound To	Field Name	Field Type
0x1c	play	toServer	location	position
			text1	string
		text2	string	
			text3	string
			text4	string

${\cal S}$ arm_animation

Packet ID	State	Bound To	Field Name	Field Type
0x1d	play	toServer	hand	varint

Packet ID	State	Bound To	Field Name	Field Type	
0x1e	play	toServer	target	UUID	

${\cal S}$ block_place

Packet ID	State	Bound To	Field Name	Field Type	
0x1f	play	toServer	location	position	
			direction	varint	
			hand	varint	
			cursorX	f32	
			cursorY	f32	
			cursorZ	f32	

ℰ use_item

Packet ID	State	Bound To	Field Name	Field Type	
0x20	play	toServer	hand	varint	

${\cal S}$ advancement_tab

Packet ID	State	Bound To	Field Name		Field Type	
0x19	play	toServer	action		varint	
			tabld if (action == 0)	if (action == 0)	switch	string
			else if (action == 1)		void	